Ramsar Information Sheet

Published on 11 April 2023

China

Hubei Xiantao Sha Lake Wetlands

Designation date	28 October 2022
Site number	2510
Coordinates	30°08'40"N 113°44'45"E
Area	2 167,37 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

Hubei Xiantao Sha Lake Wetlands is located in the Jianghan Plain in the middle reaches of the Yangtze River. It is connected with the Yangtze River in the east and the Han River in the west. Dongjing River, the only distributary channel in the lower reaches of the Han River, runs in the Site. The Site is a composite wetland ecosystem consisting of marshes, lakes, rivers and artificial wetlands with typical representation of natural or near-natural wetlands in the middle and lower reaches of the Yangtze River Basin. Rare waterfowls and their habitats are protected in the Site.

The Site is connected to Yangtze River and Han River through Dongjing River and has abundant water volume, diverse habitat types which nurtures a rich biodiversity. As an important stopover on the East Asia-Australasia migration route, the Site is a biodiversity hotspot in the Jianghan Plain, providing an ample food source and important habitat for a large number of wintering migratory birds and other wildlife, mainly including Baer's pochard (Aythya baeri), hooded crane (Grus monacha), and Boulenger's spiny frog (Quasipaa boulengeri).

Closely linked to the Yangtze River, the Site has an extremely important ecological location and plays a significant role in flood prevention and mitigation as well as water recharge for the Yangtze and Han River. In summer, the Site serves as a flood control area for the Yangtze and Han rivers, and offers flood mitigation together with other lake groups in the middle and lower reaches of the Yangtze. In winter, when the water volume of the Yangtze River decreases, the Site and the surrounding rivers provide water for agricultural irrigation and urban water consumption, providing greater resilience to impacts of drought. In addition, the Site also has ecological functions such as climate regulation, water purification, carbon sequestration, and oxygen release.

Through the Wetland Law of China and the Management Rules of Sha Lake National Wetland Park, the safety of wildlife resources and the ecological environment is being protected. Wetland habitats and regional biodiversity have been managed through restoration of water quality and wildlife habitats.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency: Xiantao City Forestry Business Development Center

Postal address:
No.2, Yibo Road
Xiantao City 433000
Hubei Province
P.R. China

National Ramsar Administrative Authority

Institution/agency: Ramsar Administrative Authority of the People's Republic of China

Postal address:
No.18 Hepingli East Road
Dongcheng District Beijing
P.R. China

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

From year: 2015

To year: 2021

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Hubei Xiantao Sha Lake Wetlands

2.2 - Site location

2.2.1 - Defining the Site boundaries

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

Former maps: 0

Boundaries description

With the same boundary as Hubei Xiantao Sha Lake National Wetland Park, the Site includes the Daocao Lake, Dongjing River and its surrounding marshland area. It is adjacent to Xiantao Levee of Dongjing River (Left Branch) in the north, Honghu Levee of Dongjing River in the south, Shishangang Drainage Sluice River in the west, and Xianhong Expressway in the east. The Dongjing River Left Branch is included in the Site.

2.2.2 - General location

a) In which large administrative region does the site lie? Xiantao City, Hubei Province

b) What is the nearest town or population centre? Sha Lake Town

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): 2167.37

Area, in hectares (ha) as calculated from GIS boundaries: 2167.342

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Evergreen sclerophyllous forests, scrubs or woodlands, Oriental Deciduous Forest Biogeographic Province, Palaearcitc Realm

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 Site has a wide variety of wetland types, with herbaceous marsh wetlands as the dominant wetland type followed by lakes, rivers and artificial wetlands, forming a representative composite wetland ecosystem in the middle and lower reaches of the Yangtze River basin. The Site acts as a flood retention area in Jianghan Plain and the main wetland system is Dongjing River, which has a close ecological connection with the Yangtze River. During the dry period, the Dongjing River feeds from the Han River and is injected into the Yangtze River through Sha Lake Wetlands, with the dikes on the north and south banks 3000-6000 m apart and the average ground elevation of 21.5 m. The confluence flood flow is 2000-3000 m3/s generally, with a maximum flow of 5060 m3/s. In 1998, during the massive flood of Yangtze River when the rainfall reached 1565.5 mm, the volume of flood water transferred to the Site was 2167.37x105 m3 such that the water level in the Site reached a maximum of 31.5 m. This shows how the Site serves as an important function in regulating the floods of the Yangtze River, ensuring the security of flood control in the lower reaches of the Yangtze River, and maintaining the regional water balance.
Other ecosystem services provided	The majority of the Site are herbaceous marshes, which primary services are water purification, carbon sequestration and reed production. In terms of water purification, the area of herbaceous marsh wetlands is 1,468.91 hectares, accounting for 67.88% of total wetland area, with a concentrated area of more than 1,000 hectares of reeds. The large area of aquatic plants can slow down the flow of water, promote sediment settlement and degrade pollutants, ensuring that the water injected into the Yangtze River maintains a high quality. In terms of carbon sequestration, marsh vegetation accumulates a large amount of inorganic and organic carbon during the growth process. It is estimated that the total annual carbon sequestration of continuous reed communities in the Site can reach about 11000-24000 t. In terms of economic production, the main industry in the Site is currently reed production. The reed farm has 130 managers and the annual output is about 10 million yuan.

☑ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information	The Site provides excellent environment and habitat for various wild animals and plants, supporting a variety of rare and threatened species. There is one critically endangered species, Baer's pochard (Aythya baeri), three endangered species, including Japanese eel (Anguilla japonica), Boulenger's spiny frog (Quasipaa boulengeri), and big-headed reeves' turtle (Mauremys reevesii), and nine vulnerable species, mainly including swan goose (Anser cygnoid), hooded crane (Grus monacha), common pochard (Aythya ferina), Chinese soft-shelled turtle (Pelodiscus sinensis), Chinese cobra (Naja atra), and so on. The Site provides excellent overwintering grounds for the threatened birds such as Baer's pochard (Aythya baeri), swan goose (Anser cygnoid), hooded crane (Grus monacha), and common pochard (Aythya ferina), and provides natural habitats for fishes and amphibians such as Japanese eel (Anguilla japonica), Boulenger's spiny frog (Quasipaa boulengeri), and big-headed reeves' turtle (Mauremys reevesii).

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	22881
Start year	2015

End year: 2021

Source of data: Bird survey data conducted by forestry departments, universities and social groups, etc.

Optional text box to provide further information: The Site is a migratory corridor for East Asian-Australian birds and an important waterfowl habitat in Central China. According to the multi-year monitoring data of the wetland park, the total number of waterfowl roosting and resting here from 2015 to 2021 were 20,073, 22,237, 24,810, 26,428, 20,066, 21,384 and 25,171, respectively, with geese and ducks and plovers being particularly abundant. The number of waterfowl observed is shown in Appendix 1 of 6.1.2.

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further information: According to the 2015-2021 bird survey data, there are eight waterfowl species in the Site that exceed 1% of their population in a particular area, including greylag goose (Anser anser), Taiga bean goose (Anser fabalis), Eurasian spoonbill (Platalea leucorodia), and Baer's pochard (Aythya baeri). See 3.3 for details.

☑ Criterion 8 : Fish spawning grounds, etc.

Justification: Connected to the Yangtze River and Han River through the Dongjing River, the Site is rich in fish resources, with 72 species of fish in 7 orders and 13 families recorded. The herbaceous marsh wetlands in the Site are widely distributed and have a large area, with abundant wetland vegetation, which are the spawning place of many kinds of fish. The permanent lake wetland in the eastern part of the Site is the key protection area for Asian swamp eel (Monopterus albus) germplasm resources, providing a high-quality place for them to raise their young. In addition, the Site also provides a sufficient food source and excellent feeding environment for river migratory fish such as Ochetobius elongatus, yellowcheek (Elopichthys bambusa). It has important significance to the fish resources of the Yangtze River Basin.

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

<no data available>

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								
Others																	
CHORDATA / REPTILIA	*Mauremys reevesii*	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐	National Protection Class II	
CHORDATA / REPTILIA	*Naja atra*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
CHORDATA / REPTILIA	*Orthriophis taeniurus*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
CHORDATA / REPTILIA	*Pelodiscus sinensis*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
CHORDATA / AMPHIBIA	*Quasipaa boulengeri*	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐		
CHORDATA / AMPHIBIA	*Quasipaa spinosa*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
Fish, Mollusc and Crustacea																	
CHORDATA / ACTINOPTERYGII	*Anguilla japonica*	☑	☐	☐	☐	☐	☐	☐	☑				EN	☐	☐		Crit8:Feeding in this 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								
CHORDATA / ACTINOPTERYGII	*Cyprinus carpio*	☑	☐	☐	☐	☐	☐	☐	☑				VU	☐	☐		Crit8:Feeding in this site
CHORDATA / ACTINOPTERYGII	*Elopichthys bambusa*	☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Crit8:Migrating through this site
CHORDATA / ACTINOPTERYGII	*Monopterus albus*	☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Crit8:Nursing in this site
CHORDATA / ACTINOPTERYGII	*Ochetobius elongatus*	☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Crit8:Migrating through this site
Birds																	
CHORDATA / AVES	*Anas falcata*	☐	☐	☑	☐	☐	☑	☐	☐	874	2015-2021	1.05		☐	☐		Crit6:1% threshold for the population of C & E Asia is 830 as of 2012.
CHORDATA / AVES	*Anser anser*	☐	☐	☑	☐	☐	☑	☐	☐	2813	2015-2021	8.79	LC	☐	☐		Crit6:1% threshold for the population of rubrirostris,E,Asia(non-bre) is 320 as of 2021.
CHORDATA / AVES	*Anser cygnoid*	☑	☐	☑	☐	☐	☑	☐	☐	2114	2015-2021	3.92	VU	☐	☑	National Protection Class II	Crit6:1% threshold for the population of inland China(non-bre) is 540 as of 2021.
CHORDATA / AVES	*Anser fabalis*	☐	☐	☑	☐	☐	☑	☐	☐	7011	2015-2021	3.05	LC	☐	☐		Crit6:1% threshold for the population of serrirostris,China(non-bre) is 2300 as of 2021.
CHORDATA / AVES	*Anser serrirostris*	☐	☐	☑	☐	☐	☑	☐	☐	2770	2015-2021	1.2		☐	☐		Crit6:1% threshold for serrirostris, China (non-bre) is 2300 as of 2021 from EAAFP CSR 1.
CHORDATA / AVES	*Aythya baeri*	☑	☐	☑	☐	☐	☑	☐	☐	6	2015-2021	1.2	CR	☐	☑	National Protection Class I	Crit6:1% threshold for the population of C, E, SE & S Asia is 5 as of 2012.
CHORDATA / AVES	*Aythya ferina*	☑	☐	☐	☐	☐	☑	☐	☐				VU	☐	☐		
CHORDATA / AVES	*Emberiza rustica*	☑	☐	☐	☐	☐	☑	☐	☐				VU	☐	☐		
CHORDATA / AVES	*Grus monacha*	☑	☐	☐	☐	☐	☑	☐	☐				VU	☑	☑	National Protection Class I	
CHORDATA / AVES	*Platalea leucorodia*	☐	☐	☑	☐	☐	☑	☐	☐	233	2015-2021	1.17	LC	☐	☐	National Protection Class II	Crit6:1% threshold for leucorodia, E Asia is 200 as of 2021.
CHORDATA / AVES	*Tringa erythropus*	☐	☐	☑	☐	☐	☑	☐	☐	354	2015-2021	1.42	LC	☐	☐		Crit6:1% threshold for the population of E,SE Asia(non-bre) is 250 as of 2021

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

Sha Lake Wetlands is located in the evergreen sclerophyllous forests, scrubs or woodlands biome of the Oriental Deciduous Forest Biogeographic Province in the Palaearcitc Realm. With a sub-arctic climate, the Site is mild, no dry season and hot in summer. The altitude is 21~33.4m. The soil-forming matrix of the Site is dominated by river alluvium and lake-phase sediments. The soil types are mainly gray tidal mud and sand fields, gray tidal mud fields, gray oil sand soils, and gray positive soils.
Located in the middle reaches of the Yangtze River Basin, the Site is a composite wetland ecosystem consisting of marsh wetlands, lake wetlands, river wetlands and artificial wetlands in the Jianghan Plain. As the major components, herbaceous marsh wetlands contain typical wetland plants such as Phragmites communis, Zizania caduciflora, and yellow floating heart (Nymphoides peltatum), which nurture rich biodiversity and become a natural gene pool for wild plants and animals.
The Site is located in the area of the Yangtze River floodplain, and the Dongjing River runs through the whole Site, which is also the main water link of the Site connecting the Yangtze River and the Han River. During the high water period, the Site is a Yangtze River backflow area where the water level rises. The lake wetland, dominated by Form. Potamogeton crispus, Form. Vallisneria natans, Form. Coon's tail (Ceratophyllum demersum), and Form. oriental lotus (Nelumbo nucifera), provides an important habitat and nursery for summer migratory birds such as common tern (Sterna hirundo) and pheasant-tailed jacana (Hydrophasianus chirurgus), as well as four major fishes and river migratory fishes. During the dry period, the water level in the Site drops as the water flows into the Yangtze River through the Dongjing River. The riverbanks and shallow lakes with plants such as Form. Typha angustifolia and Form. Polygonum hydropiper provide habitat and feeding places for wintering birds such as eurasian spoonbill (Platalea leucorodia) and Baer's pochard (Aythya baeri).
In addition, the Site, as a wetland is closely linked to the Yangtze River and thus has an important ecological location, playing a significant role in flood prevention and mitigation, water recharge and water purification of the Yangtze and Han River. This ensures the water security of the region. It also provides raw materials for the production of wetland products (such as reed products).

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		3	257.7	
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2	328.06	
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		1	1468.91	Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
1: Aquaculture ponds		0	9.16
9: Canals and drainage channels or ditches		4	100

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	*Ceratophyllum demersum*	Dominant species
TRACHEOPHYTA/MAGNOLIOPSIDA	*Fagopyrum acutatum*	National Protection Class II
TRACHEOPHYTA/MAGNOLIOPSIDA	*Glycine max soja*	National Protection Class II
TRACHEOPHYTA/MAGNOLIOPSIDA	*Nelumbo nucifera*	National Protection Class II
TRACHEOPHYTA/MAGNOLIOPSIDA	*Nymphoides peltata*	Dominant species
TRACHEOPHYTA/LILIOPSIDA	*Phragmites australis*	Dominant species
TRACHEOPHYTA/LILIOPSIDA	*Phragmites australis australis*	Dominant species
TRACHEOPHYTA/MAGNOLIOPSIDA	*Polygonum hydropiperoides*	Dominant species
TRACHEOPHYTA/LILIOPSIDA	*Potamogeton crispus*	Dominant species
TRACHEOPHYTA/MAGNOLIOPSIDA	*Trapa incisa*	National Protection Class II
TRACHEOPHYTA/LILIOPSIDA	*Typha angustifolia*	Dominant species
TRACHEOPHYTA/LILIOPSIDA	*Vallisneria natans*	Dominant species
TRACHEOPHYTA/LILIOPSIDA	*Zizania latifolia*	Dominant species

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTA/MAGNOLIOPSIDA	*Alternanthera philoxeroides*	Actual (minor impacts)
TRACHEOPHYTA/LILIOPSIDA	*Eichhornia crassipes*	Actual (minor impacts)

Optional text box to provide further information

There are four criteria for the selection of species in the List of Wild Plants under Key State Protection: 1, endangered species with very small number and narrow distribution range; 2, endangered and rare species with important economic, scientific and cultural values; 3, wild populations of important crops and related species with genetic value; 4, the species with important economic value, and resources are sharply reduced due to over-exploitation and utilization.

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	*Aix galericulata*				National Protection Class II
CHORDATA/AVES	*Alauda arvensis*				National Protection Class II
CHORDATA/AVES	*Anas formosa*				National Protection Class II
CHORDATA/AVES	*Anser albifrons*				National Protection Class II
CHORDATA/AVES	*Asio flammeus*				National Protection Class II
CHORDATA/AVES	*Asio otus*				National Protection Class II
CHORDATA/AVES	*Bubo bubo*				National Protection Class II
CHORDATA/AVES	*Buteo japonicus*				National Protection Class II
CHORDATA/AVES	*Centropus bengalensis*				National Protection Class II
CHORDATA/AVES	*Centropus sinensis*				National Protection Class II
CHORDATA/AVES	*Ciconia nigra*				National Protection Class I
CHORDATA/AVES	*Circus aeruginosus*				National Protection Class II

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	*Circus cyaneus*				National Protection Class II
CHORDATA/AVES	*Circus melanoleucos*				National Protection Class II
CHORDATA/AVES	*Circus spilonotus*				National Protection Class II
CHORDATA/AVES	*Cygnus columbianus*				National Protection Class II
CHORDATA/AVES	*Falco columbarius*				National Protection Class II
CHORDATA/AVES	*Falco peregrinus*				National Protection Class II
CHORDATA/AVES	*Garrulax canorus*				National Protection Class II
CHORDATA/AVES	*Glaucidium brodiei*				National Protection Class II
CHORDATA/AVES	*Glaucidium cuculoides*				National Protection Class II
CHORDATA/AVES	*Grus grus*				National Protection Class II
CHORDATA/AVES	*Halcyon smyrnensis*				National Protection Class II
CHORDATA/AVES	*Haliastur indus*				National Protection Class II
CHORDATA/AVES	*Hydrophasianus chirurgus*				National Protection Class II
CHORDATA/ACTINOPTERYGII	*Luciobrama macrocephalus*				National Protection Class II
CHORDATA/MAMMALIA	*Lutra lutra*				National Protection Class II
CHORDATA/AVES	*Milvus migrans*				National Protection Class II
CHORDATA/AVES	*Nettapus coromandelianus*				National Protection Class II
CHORDATA/AVES	*Ninox scutulata*				National Protection Class II
CHORDATA/AVES	*Numenius arquata*				National Protection Class II
CHORDATA/AVES	*Otus lettia*				National Protection Class II
CHORDATA/AVES	*Otus scops*				National Protection Class II
CHORDATA/AVES	*Otus sunia*				National Protection Class II
CHORDATA/AVES	*Pandion haliaetus*				National Protection Class II
CHORDATA/AVES	*Podiceps nigricollis*				National Protection Class II
CHORDATA/AVES	*Sterna hirundo*				Dominant species
CHORDATA/AVES	*Strix nivicolum*				National Protection Class II

Optional text box to provide further information

Wild animals have important ecological value. The State Council of the People's Republic of China has approved and issued the list of rare and endangered wild animals under national key protection, and the protection of these wild animals has been raised to the legal level.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfa: Humid subtropical (Mild with no dry season, hot summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 21

a) Maximum elevation above sea level (in metres): 33

- 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 ☐

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Yangtze River Basin

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 ◉

Please provide further information on the soil (optional)

The soil-forming matrix of the Site is dominated by river alluvium and lake-phase sediments. The soil types are mainly gray tidal mud and sand fields, gray tidal mud fields, gray oil sand soils, and gray positive soils. The average content of soil organic matter is 23.81 g/kg, the average content of nitrogen is 120 ppm, the average content of potassium is 133 ppm, and the average content of phosphorus is 7.15 ppm.

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 precipitation	☐	No change
Water inputs from surface water	☑	No change

Water destination

Presence?	
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

The Site is located in the Jianghan Plain, a group of lakes in the middle and lower reaches of the Yangtze River basin. It is connected to the Yangtze River in the east and the Han River in the west. The Dongjing River runs through the entirety of the Site and is the main water system of the Site. Rainfall input and surface water input maintain the water source of this Site.
The Donging River is located in the JiangHan Plain which is north of the Jing River in the middle and lower reaches of the Yangtze River and south of the lower reaches of the Han River. It starts from the Han River at the head of Qianjiang River and ends at the Yangtze River at Sanhewan, Hannan District, Wuhan City, with a river length of 173 km. It is the only diversion channel in the lower Han River. The highest water level in recent years is 31.5 m. The Site is a Yangtze River backflow area during the high water season, and the water flows into the Yangtze River through the Dongjing River during the low water season.
The water level of the Site is relatively stable, especially in autumn and winter, with the highest water level in July and the lowest water level in January, and the rising water period from April to July. The inundated area of the Site increases with the rising water level, and the inundated area reaches the maximum when the water level is higher than 15 m.

4.4.5 - Sediment regime

- [ ] Significant erosion of sediments occurs on the site
- [x] Significant accretion or deposition of sediments occurs on the site
- [ ] Significant transportation of sediments occurs on or through the site
- [x] 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)
- [x] Alkaline (pH>7.4)
- [ ] Unknown

Please provide further information on pH (optional):

The pH range is between 7.8 and 8.3.

4.4.7 - Water salinity

- [x] 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

(ECD) Dissolved gases in water

Dissolved oxygen concentration ranged from 6.2 to 7.27 mg/L, with an annual average value of 7.32 mg/L, the highest in August and the lowest in December.

4.4.8 - Dissolved or suspended nutrients in water

- [x] Eutrophic
- [ ] Mesotrophic
- [ ] Oligotrophic
- [ ] Dystrophic
- [ ] 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 ( )

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
Fresh water	Water for irrigated agriculture	High
Wetland non-food products	Reeds and fibre	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
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	High
Pollution control and detoxification	Water purification/waste treatment or dilution	High
Climate regulation	Local climate regulation/buffering of change	High
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	High
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Sediment retention	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Carbon storage/sequestration	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High

Within the site: 0

Outside the site: 200,000s

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 ☑

Description if applicable

The Site had unearthed stone axes, stone adzes, stone net pendants, pottery fragments and red-burned clay about 5,000 years ago, with more than 20 specimens collected. In addition, Asian elephant tooth plates as well as antlers and wild buffalo bones from the Warring States period were unearthed, which have high cultural research value, indicating that the area around Sha Lake Wetlands has been an ideal and suitable site for local ancestors to live in since ancient times.

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
National/Federal government	☑	☑

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:	Administration Bureau of Hubei Xiantao Sha Lake National Wetland Park
Provide the name and/or title of the person or people with responsibility for the wetland:	Yongfei Fu, Director of Bureau
Postal address:	No.2, Yibo Road, Xiantao City 433000, Hubei Province, P.R. China
E-mail address:	79168536@qq.com

5.2 - Ecological character threats and responses (Management)

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

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Low impact		☑	☐
Water abstraction	Low impact		☑	☐

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Marine and freshwater aquaculture	Low impact		☑	☑

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	Low impact		☑	☑

Human intrusions and disturbance

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

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/alien species	Low impact		☑	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Storms and flooding	Low impact		☑	☑

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Wetland Park	Hubei Xiantao Sha Lake National Wetland Park		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
Catchment management initiatives/controls	Implemented
Improvement of water quality	Implemented
Habitat manipulation/enhancement	Implemented
Hydrology management/restoration	Implemented
Re-vegetation	Implemented
Soil management	Implemented
Land conversion controls	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented
Control of invasive alien plants	Implemented
Control of invasive alien animals	Implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Implemented
Regulation/management of wastes	Implemented
Livestock management/exclusion (excluding fisheries)	Implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented

Other:

In 2013, the State Forestry Administration approved the establishment of Hubei Xiantao Sha Lake National Wetland Park (pilot), and in the same year, the Hubei Xiantao Sha Lake National Wetland Park Administration was established as the wetland park management agency, and the wetland park passed the pilot acceptance in 2017.
Xiantao Municipal Government issued the "Management Measures of Xiantao Sha Lake National Wetland Park", and the wetland park has formulated management regulations, joint meetings, patrol management, ecological monitoring management and other systems to strengthen inspection and management and effectively protect the safety of wildlife resources and ecological environment within the Site. In addition, the Xiantao Court has set up a judicial protection base for ecological environment in the Site to effectively protect the ecological safety of the Site.
The park administration carried out comprehensive management of the water environment of Dongjing River and Daocao Lake, removed the fenced lakes and fish farming, returned farming to wetlands, restored river bank cultured forests, protected natural shorelines, dredged bottom mud, restored wildlife habitats, removed exotic species, maintained water quality and other projects, effectively protected and restored wetland habitats and regional biodiversity.
The park administration had aslo built a wetland science museum, bird watching tower, wetland culture corridor and other educational facilities, and widely carried out various forms of science education activities in conjunction with the surrounding colleges and universities, and carried out national "Wildlife Protection Day", the Sha Lake Wetlands Landscape Photography Contest and other thematic activities, and won the title of "Ecological Ethics Education Base for Minors in Hubei Province" awarded by the Provincial Wildlife Protection Association.

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 ◉

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Soil quality	Implemented
Birds	Implemented
Plant community	Implemented
Plant species	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented
Water quality	Implemented
Water regime monitoring	Implemented

In 2015, a study on the impact of the South-North Water Diversion Project on Sha Lake Wetlands and countermeasures was conducted.
In 2015-2016, two natural resource monitoring surveys were carried out to map the resource background.
During 2015-2021, autumn and winter waterbird surveys and monitoring were conducted.
Five monitoring sites were established to implement monitoring of wetland hydrology, vegetation, wildlife, especially bird populations.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

[1] Hubei Wildlife Protection Station, Hubei Ecological Engineering Vocational and Technical College, etc. 2012. Master Plan of Hubei Sha Lake National Wetland Park (2013-2020).
[2] Wuhan Huokesi Technology Development Company Limited, Hubei Xiantao Sha Lake National Wetland Park Administration. 2021. Monitoring report of waterbirds in Sha Lake National Wetland Park, Xiantao, Hubei.
[3] Zhongtan Hu. 2013. Status and investigation on the conservation and sustainable development of Xiantao Sha Lake Wetland Park. The Third China Wetland Culture Festival and Dongying International Wetland Conservation Exchange Conference.
[4] Deguang Xu, Peng Ye et al. 2009. Study on tourism development and tourism of Sha Lake Wetland Park in Xiantao City. Regional Tourism:Innovation and Transformation - Proceedings of the 14th National Symposium on Regional Tourism Development and the 2nd Hainan International Tourism Island Grand Forum.
[5] Miklos D.F. Udvardy. A Classification of the Biogeographical Provinces of the World, IUCN Occasional paper No 18, Switzerland, 1975.
[6] Catalog of Wildlife under Key State Protection. 2021. http://www.gov.cn/xinwen/2021-02/09/content_5586227.htm.
[7] List of Wild Plants under Key State Protection. 2021. http://www.gov.cn/zhengce/zhengceku/2021-09/09/content_5636409.htm.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<2 file(s) uploaded>

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

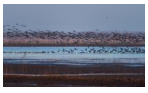
Please provide at least one photograph of the site:


Marsh wetlands (*Hubei Xiantao Sha Lake National Wetland Park Administration, 11-05-2013*)


Recurvirostra avosetta (*Hubei Xiantao Sha Lake National Wetland Park Administration, 10-02-2017*)


Geese and ducks (*Hubei Xiantao Sha Lake National Wetland Park Administration, 17-12-2016*)


Anas crecca (*Hubei Xiantao Sha Lake National Wetland Park Administration, 17-11-2019*)


Geese and ducks (*Hubei Xiantao Sha Lake National Wetland Park Administration, 14-02-2019*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2022-10-28