Ramsar Information Sheet

Published on 11 April 2023

China

Hunan Maoli Lake Wetlands

Designation date	28 October 2022
Site number	2505
Coordinates	29°24'42"N 111°55'37"E
Area	4 776,03 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

Hunan Maoli Lake Wetlands is located in Jinshi City, Changde City in the Hunan Province of People's Republic of China. It belongs to Dongting Lake water system. In the Site, the Maoli Lake has a lake surface of 2044.2 hectares, 6 streams and 15 ditches, and a rainwater collection area of 189 square kilometers, making it the largest lake in Jinshi City. The water quality is above Class III, and Class II water standard has been reached in some periods.
Maoli Lake is in a transitional humid monsoon climate zone between the mid-subtropical zone and the northern subtropical zone. The biodiversity is rich in the wetland with 161 families and 862 species of vascular plants, 19 families and 38 species of ferns, 6 families and 13 species of gymnosperms, and 136 families and 811 species of spermatophytes. There are 332 species of wild vertebrates belonging to 87 families, including 17 species belonging to 8 families in Mammalia, 198 species belonging to 50 families in Aves, 13 species belonging to 5 families in Amphibia, and 79 species belonging to 16 families in Fish.
The interwoven streams provide vital wintering habitat for birds migrating along the China's central flywaymakes and the East Asian - Australasia Flyway (EAAF). There are 148 species of birds which are protected and listed in various intergovernmental agreements. The Site is known for its complex structure with lakes converged by mountain creeks and have relatively stable biodiversity. Being part of the National Wetland Park, the Site helps in protection of species and ecosystems and promotes scientific research, public education, international communication, ecotourism, and sustainable development within community. It was officially established as a National Wetland Park by the National Forestry and Grassland Administration in 2015.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency: The Maoli Lake Wetland Park Management Office, Jinshi City, Hunan

Postal address: No.75 Datong Road, Jinshi City, Hunan

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 100714
P.R. China

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

From year: 2011

To year: 2021

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Hunan Maoli 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

Hunan Maoli Lake Ramsar Site is located in the southeast of Jinshi City, with Maoli Lake Wetland as the main body. The Wetland has a natural boundary surrounded by the Zhoujiagang Stream, Hujiaqiao Stream, Baiyian Stream, Songjiaping Stream, Wajiazui Stream and Xinjiatai Stream. To the east of the Site there is Baohedi Town, to its west - Baiyi Town and Tanghua Village, to its north - Lijiapu Village, and to its south - Dukou Town. The coordinates of the Site are: N 29 21 '05.41 "-29 29' 34.50"; E 111 58 '27.86 "-111 51' 13.28".

The Site shares its boundary with the Maoli Lake National Wetland Park.

See attached Figure 01 for more details

2.2.2 - General location

a) In which large administrative region does the site lie? Jinshi City, Changde City, Hunan Province

b) What is the nearest town or population centre? Baiyi 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): 4776.03

Area, in hectares (ha) as calculated from GIS boundaries: 4774.864

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	The global 200 No. 149 Yangtze river & Lakes

Other biogeographic regionalisation scheme

The Maoli Lake Ramsar Site belongs, in terms of floristic region, to a transitional zone between mid-subtropical zone and the north temperate zone, a pan-arctic florist region, and to China-Japan forest subregions, granting this wetland a complex and diverse mixture of plants and geographic components. The flora is rich and abundant, with all kinds of regional plants found here except for ones native to central Asiatic flora regions.

According to the geographical division of animals in the world, Maoli Lake is near the middle area between Palaearctic and Oriental realms. According to the distribution of animals here, the breeding vertebrates are mainly Oriental and widespread species, and the overwintering animals are mainly Palaearctic animals, especially for the birds.

According to the more subdivided animal regionalization, Maoli Lake is mainly located in Central China of Oriental boundary, which is the eastern hilly plain subregion of Central China. In terms of natural region, it belongs to the southern monsoon region, and the ecological geographical fauna is mainly characterized by subtropical canopy, grassland, and farmland fauna.

From the perspective of fish, Maoli Lake belongs to East China (river plain), where cypriniformes is the dominant order. The wetland belongs to freshwater aquatic animals regarding the geographical division.

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	Maoli Lake belongs to the Dongting Lake river system, which is formed by major streams including Zhoujiagang River, Hujiaqiao River, Baiyi'an River, Songjiaping River, Wawuzui River and Xinjiatai River, as well as dozens of other small streams and ditches that meander between hills and converge into the Site, becoming largest stream catchment lake in the Hunan Province and the second largest natural freshwater lake in the Hunan Province after the Dongting Lake. After the excavation of Zhujiashan flood channel in 1963, Maoli Lake and West Lake were connected, covering an area of 3,857.5 hectares, with an annual inflow of 285 million cubic meters, an outflow of 233 million cubic meters, and an annual water storage of 138 million cubic meters. The highest flood level in Maoli Lake was 34.88 meters (occurred in July 1998), the warning water level is 33.50 meters, the safe water level is 34.72 meters, and the perennial low water level is 30.50 meters. Hydrological services: 1. Controlling, alleviating, and preventing floods Maoli Lake, as the biggest stream catchment lake in Hunan, is very complex regarding its water systems, which is formed from convergence of dozens of streams and creeks. The water storage is 138 million cubic meters, the annual inflow is 285 million cubic meters, and the annual outflow is 233 million cubic meters, which altogether provides greater flood control and regulation capacity. Essentially, Maoli Lake is an important flood spillway that has significant implications for the safety of nearby residents. 2. Seasonal storage for wetlands and other downstream reaches Maoli Lake belongs to the Dongting River System, providing important water source to Yuanjiang River through Ya River. Yuanjiang River, as an important part of Dongting River System, which is one of the four biggest tributaries of Hunan Province- Xiangjiang River, Zijiang River, Yuanshui River, and Lishui River - and eventually flows into Dongting River, playing an important role in protecting the ecosystem and seasonal regulation of Dongting River. 3. Replenishment of aquifer Maoli Lake has a 360 square kilometres of catchment area, making it an important replenishing source for nearby aquifers.
Other ecosystem services provided	Maoli Lake is the Class-I water resource reserve, providing high quality drinking water for nearby communities coming from the Gexi Stream. The abundant vegetation, diverse animals and microbes can filter the run-off water flowing into the wetland, absorb heavy metals, and decompose harmful materials, thus helping in purifying the water to some extent.
Other reasons	Dongting Lake is a lake formed on the remains of degraded ancient Yun-meng Lake Groups. Maoli Lake is a part of ancient Dongting River, and is surrounded by hills and ridges which protects its ancient natural lake shorelines. Because all the lands around Maoli Lake are Quaternary red soil (formed about 3 million years ago), the shoreline of Maoli Lake is reddish in color. At present, Maoli Lake has an ancient lake shoreline of about 14 kilometers in length, which is distributed in Zhumu Mountain Hongdao section, Huaqiao Village section, Baiyi Anxi section, Wangjiazui-Qingyuzui section and other places.

☑ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

There are 862 species of vascular plants belonging to 528 genera and 161 families, among which there are 38 species of ferns belonging to 24 genera and 19 families, 13 gymnosperms belonging to 11 genera and 6 families, 811 species of spermatophyte belonging to 493 genera and 136 families. There are 7 national second-class protected plants: ceratopteris pteridoides, Ceratopteris thalictroides, Nelumbo nucifera, Trapa incisa, Fagopyrum dibotrys, glycine ussuriensis, Zoysia sinica Hance.

According to the statistics collected from the scientific supervision and research from 2017 to 2021, there are:

3 critically endangered (CR) species - Baer's Pochard, Siberian Crane, Yellow-breasted Bunting,

2 endangered (EN) species - one is a bird, Scaly-sided Merganser, another is a reptile, Reeves' Turtle,

5 vulnerable (VU) species - one mammal, leopard cat; one bird, Common Pochard; 3 reptiles, soft – shell turtle, Orthriophis taeniurus, and Naja atra,
For more details see 3.3

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers: 21131

Start year: 2017

End year: 2021

Source of data: Beijing Forestry University (BJFU), National Bird Banding Center, Central South University of Forestry and Technology, Hunan Zhonglei Ecological Technology Co. Ltd, Wuhan Yeke Science and Environment Consultation Co. Ltd, and civil groups.

Optional text box to provide further information

Since the beginning of the monitoring work in the Maoli Lake wetlands, comprehensive monitoring has only been conducted in the last 3 years after improving the technical manpower, equipment, and transportation facilities. In the past three years (2019-2021), more than 20000 waterfowl have been recorded in the Maoli Lake in winter, with 20744, 21910, and 20738 respectively.
Among them, the Baer's pochard and black stork account for 5% of the population in the biogeographic area, and the falcated duck accounts for 3% of the population in the biogeographic area.

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further information

According to WPE5 standard, there are 5 species, whose population exceed 1 % of the estimated total biogeographic population of migratory birds, including Falcated Duck (Mareca falcata), Green-winged Teal (Anas crecca), Baer's Pochard (Aythya baeri), Black Stork (Ciconia nigra), and Eurasian Spoonbill (Platalea leucorodia).

The Black Stork reaches 12 percent of the total estimated population worldwide, Baer's Pochard reaches 5.2 percent of the total estimated population worldwide, and Falcated Duck reaches 3.17 percent.

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 / POLYPODIOPSIDA	*Ceratopteris thalictroides*	☑	☐	☐	LC	☐	National Second-Class	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Fagopyrum acutatum*	☑	☐	☐		☐	National Second-Class	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Glycine max soja*	☑	☐	☐		☐	National Second-Class	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Nelumbo nucifera*	☑	☐	☐		☐	National Second-Class	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Trapa incisa*	☑	☐	☐	LC	☐	National Second-Class	
TRACHEOPHYTA / LILIOPSIDA	*Zoysia sinica*	☑	☐	☐		☐	National Second-Class	

National Forestry and Grassland Administration, Ministry of Agriculture and Rural Affairs of the People's Republic of China. The List of National Key Protected Wildlife [EB/OL], (2021-09-07). www.gov.cn/zhengce/2021-09/07/content_5727413.htm

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 / AMPHIBIA	*Hoplobatrachus rugulosus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National key protected animals
CHORDATA / REPTILIA	*Mauremys reevesii*	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐	National Second-Class	National key protected wildlife、IUCN EN
CHORDATA / REPTILIA	*Naja siamensis*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		IUCN VU
CHORDATA / REPTILIA	*Orthriophis taeniurus*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		synonym of Elaphe taeniura
CHORDATA / REPTILIA	*Pelodiscus sinensis*	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		IUCN VU
CHORDATA / MAMMALIA	*Prionailurus bengalensis*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National key protected wildlife、IUCN VU
Birds																	
CHORDATA / AVES	*Accipiter gularis*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Accipiter nisus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Accipiter soloensis*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Accipiter virgatus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe

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	*Actitis hypoleucos*	☐	☐	☐	☐	☐	☑	☐	☐	1	2019-2020		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Aix galericulata*	☑	☐	☐	☐	☐	☑	☐	☐	24	2019		LC	☐	☐	National Second-Class	National Key Protected Wildlfe, Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anas acuta*	☐	☐	☐	☐	☐	☑	☐	☐	91	2019-2021			☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anas clypeata*	☐	☐	☐	☐	☐	☑	☐	☐	19	2019-2021			☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anas crecca*	☐	☐	☑	☐	☐	☑	☐	☐	11306	2020	1.47	LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5 Crit6:1% threshold for the population of crecca, E & SE Asia (non-bre) is 7700 as of 2012.
CHORDATA / AVES	*Anas falcata*	☐	☐	☑	☐	☐	☑	☐	☐	2632	2020	3.17		☐	☐		Crit6:1% threshold for the population of C & E Asia is 830 as of 2012.
CHORDATA / AVES	*Anas platyrhynchos*	☐	☐	☐	☐	☐	☑	☐	☐	470	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anas poecilorhyncha zonorhyncha*	☐	☐	☐	☐	☐	☑	☐	☐	312	2019-2021			☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anas strepera*	☐	☐	☐	☐	☐	☑	☐	☐	1508	2019-2021			☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anser anser*	☐	☐	☐	☐	☐	☑	☐	☐	71	2019-2021			☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anser fabalis*	☐	☐	☐	☐	☐	☑	☐	☐	42	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Anser serrirostris*	☐	☐	☐	☐	☐	☑	☐	☐	109	2019-2021			☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Ardea cinerea*	☐	☐	☐	☐	☐	☑	☐	☐	247	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Aythya baeri*	☑	☐	☑	☐	☐	☑	☐	☐	26	2021	5.2	CR	☐	☑	National First-Class	1% Standard、IUCN CR、Periodic Inhabitant Population is listed in Criterion 5 Crit6:1% threshold for the population of C, E, SE & S Asia is 5 as of 2012.
CHORDATA / AVES	*Aythya ferina*	☑	☐	☐	☐	☐	☑	☐	☐	191			VU	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Aythya fuligula*	☐	☐	☐	☐	☐	☑	☐	☐	165	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Botaurus stellaris*	☐	☐	☐	☐	☐	☑	☐	☐	1	2019-2020		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Bucephala clangula*	☐	☐	☐	☐	☐	☑	☐	☐	23	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Buteo japonicus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Calidris alpina*	☐	☐	☐	☐	☐	☑	☐	☐	346	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5

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	*Calidris temminckii*	☐	☐	☐	☐	☐	☑	☐	☐	47	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Centropus bengalensis*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Centropus sinensis*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Charadrius dubius*	☐	☐	☐	☐	☐	☑	☐	☐	24	2019		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Ciconia nigra*	☑	☐	☑	☐	☐	☑	☐	☐	12	2019	12	LC	☐	☐	National First-Class	1% Standard, National Key Protected Wildlfe, Periodic Inhabitant Population is listed in Criterion 5 Crit6:1% threshold for the population of E Asia (non-bre) is 1 as of 2012.
CHORDATA / AVES	*Circus cyaneus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Cygnus columbianus*	☑	☐	☐	☐	☐	☑	☐	☐	43	2019-2021		LC	☐	☐	National Second-Class	National Key Protected Wildlfe, Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Egretta garzetta*	☐	☐	☐	☐	☐	☑	☐	☐	132	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Emberiza aureola*	☑	☐	☐	☐	☐	☐	☐	☐				CR	☐	☑	National First-Class	
CHORDATA / AVES	*Emberiza siemsseni*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Falco peregrinus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☑	☐	National Second-Class	National Key Protected Wildlife,CITES Appendix I
CHORDATA / AVES	*Fulica atra*	☐	☐	☐	☐	☐	☑	☐	☐	1099	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Gallinago gallinago*	☐	☐	☐	☐	☐	☑	☐	☐	9	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Gallinula chloropus*	☐	☐	☐	☐	☐	☑	☐	☐	470	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Garrulax canorus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Grus leucogeranus*	☑	☐	☐	☐	☐	☐	☐	☐				CR	☐	☑	National First-Class	
CHORDATA / AVES	*Himantopus himantopus*	☐	☐	☐	☐	☐	☑	☐	☐	10	2019-2020		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Hydrophasianus chirurgus*	☑	☐	☐	☐	☐	☑	☐	☐	3	2019-2021		LC	☐	☐	National Second-Class	National Key Protected Wildlfe, Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Mergellus albellus*	☑	☐	☐	☐	☐	☑	☐	☐	40	2019-2021		LC	☐	☐	National Second-Class	National Key Protected Wildlfe, Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Mergus merganser*	☐	☐	☐	☐	☐	☑	☐	☐	9	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5

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	*Mergus squamatus*	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐	National First-Class	
CHORDATA / AVES	*Milvus migrans*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Nycticorax nycticorax*	☐	☐	☐	☐	☐	☑	☐	☐	356	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Otus sunia*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Pandion haliaetus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Platalea leucorodia*	☑	☐	☑	☐	☐	☑	☐	☐	126	2019	1.26	LC	☐	☐	National Second-Class	National Key Protected Wildlfe, 1% standard Crit6:1% threshold for the population of(major), E Asia is 100 as of 2012.
CHORDATA / AVES	*Podiceps nigricollis*	☑	☐	☐	☐	☐	☑	☐	☐	3	2021		LC	☐	☐	National Second-Class	National Key Protected Wildlfe
CHORDATA / AVES	*Recurvirostra avosetta*	☐	☐	☐	☐	☐	☑	☐	☐	272	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Tachybaptus ruficollis*	☐	☐	☐	☐	☐	☑	☐	☐	305	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Tadorna ferruginea*	☐	☐	☐	☐	☐	☑	☐	☐	66	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Tadorna tadorna*	☐	☐	☐	☐	☐	☑	☐	☐	22	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Tringa glareola*	☐	☐	☐	☐	☐	☑	☐	☐	13	2019		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Tringa nebularia*	☐	☐	☐	☐	☐	☑	☐	☐	25	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Tringa ochropus*	☐	☐	☐	☐	☐	☑	☐	☐	3	2019-2021		LC	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Vanellus vanellus*	☐	☐	☐	☐	☐	☑	☐	☐	112	2019-2021		NT	☐	☐		Periodic Inhabitant Population is listed in Criterion 5
CHORDATA / AVES	*Zosterops erythropleurus*	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Second-Class	National Key Protected Wildlfe

1) Percentage of the total biogeographic population at the site

Maoli Lake wetland is an important wintering site for Anatidae migratory birds. In the past 3 years, there have been more than 20,000 migratory birds wintering here, among which Anatidae's population exceeded 16,000. In 2021, 26 Baer's Pochard, a critically endangered (CR) species, was recorded wintering in Maoli Lake, meeting the 5 % standards. Also in 2021, Yellow-breasted Bunting, a critically endangered (CR) species, was recorded migrating across Maoli Lake Wetland. For five consecutive years, the Black Stork, national first-class protected animal, has been recorded in Maoli wetland.

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

Maoli Lake Wetland belongs to the Dongting river system, which is in the No.149 of Yangtze River & Lakes biogeographical zone, among the 200 key areas marked by WWF.
1. Ecosystem Components
a. Geology and Geomorphology: The areas surrounding Maoli Lake is in a transitional zone stretching from what remains of Wuling Mountain to Dongting River Basin, whose terrain, tilting toward northeast, is defined by the Lishui River System, the southwest to which is Wuling Ridges and the northeast to which is the lower reaches plain of Yangtze River.
b. Soil: There is no unique stratum within Maoli Lake but the surroundings are mainly made up of Quaternary red soil.
c. Climate: Maoli Lake is in a transitional humid monsoon climate zone between mid-subtropical zone and the northern subtropical zone.
d. Hydrology: Maoli Lake belongs to the Dongting Lake river system, formed by dozens of streams and ditches, and is the largest stream catchment lake in Hunan Province.
e. Wetland Resources: The total area is 4264.3 hectares.
f. Wildlife resources: There are 161 families and 862 species of vascular plants in wetlands. There are 332 species of wild vertebrates in 86 families including 17 species in 8 families of Mammalia, 198 species in 50 families of Aves, 25 species 8 families of reptiles, 13 species in 5 families of amphibians, and 79 species in 16 families of fishes. There are many highly concerned species of great protective value, such as Baer's Pochard, Siberian Crane.
2. Ecological Process
a. Biochemical processes: The interaction between organic and inorganic bodies in the area maintains the material cycle and energy flow in the area.
b. Animal breeding: The Maoli Lake Wetland is a breeding ground for migratory birds such as the spot-billed duck (Anas zonorhyncha) and Pheasant-tailed Jacana (Hydrophasianus chirurgus), as well as various types of resident birds. 111 species of birds breed in the wetlands of Maoli Lake, accounting for 56.35% of the total number of bird species in Maoli Lake.
c. Migration and Wintering: Maoli Lake Wetland is an important wintering site and stopover for migratory birds in the East Asian – Australasia Flyway (EAAF).
d. Aquaculture: The Maoli Lake stream-lake wetland system provides superior production and living conditions for the surrounding residents. It provides clean water and serves as a source of various aquatic products.
3. Ecosystem Services
a. Supply Services: Maoli Lake Wetland provides various aquatic products for nearby communities and serving as an important water source.
b. Regulation Services: The entire area of Maoli Lake Wetland is 3857.5 hectares, with an annual water storage of 138 million cubic meters, playing a significant role in flood control.
c. Support Services: Maoli Lake Wetland has a superior geographical location, suitable climate and hydrothermal conditions, which supports a wealth of wildlife resources. It is the migratory stopover for 130 species of waterfowls.
d. Cultural Services: The Site is used for research purposes by for domestic and international scholars.

Maoli Lake, with its unique ecological structure, complex river system formed by dozens of creeks, and a complicated ecosystem formed by second largest freshwater in Hunan, includes intricate food web and ecological products, generates a diverse agriculture and aquaculture and exhibits prominent value of ecoservices and economy.

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		0	4.75	
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		1	3461.53	Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		4	171.69	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		0	3.25	

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	140.87
2: Ponds		2	238.13
3: Irrigated land		3	207.19
9: Canals and drainage channels or ditches		0	36.89

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Roads, forestry (non-wetland habitat)	511.72

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/POLYPODIOPSIDA	*Ceratopteris pteridoides*	Rare

Invasive alien plant species

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

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	*Anser albifrons*	68	2020	0.38	National Second Class Protected Animal
CHORDATA/AVES	*Arenaria interpres*	320	2017	1.1	National Second Class Protected Animal
CHORDATA/AVES	*Circus spilonotus*	3	2020		National Second Class Protected Animal
CHORDATA/AVES	*Elanus caeruleus*	7	2021		National Second Class Protected Animal
CHORDATA/AVES	*Falco subbuteo*	3	2021		National Second Class Protected Animal
CHORDATA/AVES	*Falco tinnunculus*	3	2020		National Second Class Protected Animal
CHORDATA/AVES	*Halcyon smyrnensis*	4	2021		National Second Class Protected Animal
CHORDATA/AVES	*Ictinaetus malayensis*	1	2021		National Second Class Protected Animal
CHORDATA/AVES	*Limicola falcinellus*	120	2018	0.48	National Second Class Protected Animal
CHORDATA/AVES	*Limnodromus semipalmatus*	6	2021		National Second Class Protected Animal
CHORDATA/AVES	*Numenius minutus*	30	2017		National Second Class Protected Animal
CHORDATA/AVES	*Thalasseus bergii*	310	2017		National Second Class Protected Animal

Invasive alien animal species

Phylum	Scientific name	Impacts
MOLLUSCA/GASTROPODA	*Pomacea canaliculata*	Actual (major impacts)

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.
And the reference is http://www.gov.cn/xinwen/2021-02/09/content_5586227.htm.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfa: Humid continental (Humid with severe winter, no dry season, hot summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 8

a) Maximum elevation above sea level (in metres): 25

- [ ] Entire river basin
- [x] 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.

Dongting River Basin in the middle reaches of Yangtze River

4.4.3 - Soil

- [x] Mineral
- [x] 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)

Around Maoli Lake is a gentle hill, with a ground elevation of 28-60 meters. It slopes slowly towards the lake basin and gradually lowers until it is submerged by the lake. Maoli Lake Wetland is a Quaternary red soil with a long history of parent deposition and soil development, and its soil formation is quite profound. At present, there is no phenomenon of silt sorting and stratification.

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?	
Feeds groundwater	No change
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	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 main water sources of the wetland include more than twenty streams and ditches, and the surface water such as the precipitation collected in nearby catchment areas. The runoff from each stream account for more than 90 percent of the water in wetland; the water quality is stable and generally excellent.

The average annual rainfall of Maoli Lake is 1164.3 mm. The average annual evaporation is 1320.1 mm. The annual inflow is 285 million cubic meters, and the outflow is 233 million cubic meters. The annual water storage is 138 million cubic meters, with 2 times of annual water body exchange. Maoli Lake peaked its flood level at 34.88 meters (July 1998), the guaranteed water level is 34.72 meters, and the perennial low water level is 30.50 meters.

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 ☐

Please provide further information on pH (optional):

According to the statistics collected in 2021, the pH of Maoli Lake water body ranged from 7.21 to 7.9, the lowest of which was collected in West Maoli Lake on 8th April, and the highest of which was collected in West Maoli Lake on 6th November.

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 ☐

Please provide further information on salinity (optional):

Maoli Lake is an inland permanent freshwater lake and permanent freshwater river wetland.

(ECD) Dissolved gases in water

Monitoring data in 2021 showed that the range of dissolved oxygen in the water body of Maoli Lake was between 8.4-11.5 mg/L. The range of dissolved oxygen in the water body of Maoli Lake in November was between 8.4-8.5 mg/L; the range of dissolved oxygen in the water body of Maoli Lake in January was between 10.1-11.5 mg/L.

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐
Mesotrophic ☐
Oligotrophic ☐
Dystrophic ☐
Unknown ☑

(ECD) Water conductivity: 12.1~16 μS/cm

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)	High
Fresh water	Drinking water for humans and/or livestock	High
Fresh water	Water for irrigated agriculture	High
Wetland non-food products	Livestock fodder	Low
Wetland non-food products	Reeds and fibre	Medium
Genetic materials	Ornamental species (live and dead)	Medium

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
Biological control of pests and disease	Support of predators of agricultural pests (e.g., birds feeding on locusts)	High
Hazard reduction	Flood control, flood storage	High
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Inspiration	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	High
Spiritual and inspirational	Spiritual and religious values	Low
Spiritual and inspirational	Aesthetic and sense of place values	High
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study site	Medium

Supporting Services

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

Optional text box to provide further information

According to the Records of Lixian County, Maoli Lake belonged to Dongting Lake in ancient times and was the largest stream lake in Hunan Province. The lake area was formed by dozens of streams and ditches and winding from the hills and hills, forming a unique landscape landscape. Maoli Lake has been an important living area for the local people since ancient times, providing local people with water sources and various sources of food such as fish, shrimps, snails, shellfish, lotus roots, water chestnuts and gorgon euryale. It has nourished the people of Lixian County and Jinshi City. It also directly affects the local culture and promotes the formation and development of local folk culture such as Jinshi Fisheries Drum, Lishui trumpet, Old Jinshi Lantern Festival, and farming and fishery culture including the oldest rice farming civilization in the world with a history of 7,000 years. After reclamation and other human activities, Maoli Lake suffered certain damage, but after the protection of the wetland park, the natural ecology of Maoli Lake has been greatly improved, and it has become the second largest high-quality freshwater lake in Hunan Province.

Within the site: 0

Outside the site: 100000

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

Where economic studies or assessments of economic valuation have been undertaken at the site, it would be helpful to provide information on where the results of such studies may be located (e.g. website links, citation of published literature):

[1] Liu Ting. Study on the factors influencing farmers' willingness to participate in ecological compensation for surface source pollution prevention and control in the Maurice Lake region [D]. Zhongnan University of Forestry Science and Technology, 2021.
[2] Lei D. Water Containment Capacity and Value Assessment of Lakeside Maohu Bamboo Forest in West Maurice Lake, Hunan[J]. World Bamboo and Rattan Newsletter,2020,18(02):29-32+42.
[3] Xiang Xinzhi. Research on the ecological compensation mechanism of farmers in Maury Lake wetland based on the willingness to be paid[D]. Zhongnan University of Forestry Science and Technology, 2020.
[4] Chen P, Bai Y, Liu XIAO F, Luo R. The analysis and application of environmental big data in watershed ecosystem--Ximao Lake as an example[J]. Environmental Protection,2018,46(19):61-67.
[5] Zeng Zenan. Study on ecological restoration zoning planning of West Maury Lake[D]. Zhongnan University of Forestry Science and Technology,2018.
[6] Huang Yujun. Research on wetland park planning based on low-carbon concept [D]. Zhongnan University of Forestry Science and Technology, 2014.
[7] Gu Wenqian. Simulation study on the hydrological effect of vegetation ecological restoration in the sub-watershed of Zhoujiagang Creek, Maury Lake, Jincheng, Changde[D]. Zhongnan University of Forestry Science and Technology,2018.

4.5.2 - Social and cultural values

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

Description if applicable

To meet the relevant construction requirements and work needs of Maoli Lake Wetland Park, With the vigorous promotion and training of Wetland Park Management Office, strict ecological species breeding standards were adopted, and the use of pesticides and fertilizers was strictly controlled, which basically reduced and avoided the pollution of agricultural non-point source pollution to the lake area, and the water quality of Maoli Lake was greatly improved. Through strict control of farmers and aquaculture enterprises, strict ecological fishery measures have been widely adopted in the lake area and surrounding aquaculture ponds, avoiding corresponding pollution and benefiting community residents.

The construction of Maoli Lake Wetland Park has also promoted the development of surrounding rural tours, bringing economic benefits to local aborigines, easing the contradiction between ecological protection and economic development, and realizing green development.

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

Description if applicable

There are a lot of anthropoid ruins, paleolithic and neolithic runis, Zhaoshi city subculture, Daxi culture, Qujialing culture, and Longshan culture. As of recently, there have been more than 14,000 precious historical relics excavated, including various stone artifacts from neolithic era, potteries, bronze wares, steel wares, weaponries dating from ancient era to Qing Dynasty, and coins and Persian golds from various reigns and dynasties; what stands out the most are the national treasures, including Rare Gold Tripods, Tripod Lid, Faux Goblet, and Bronze Terracotta. Maoli Lake belongs to Qujialing cultural circle and is one of the earliest origins of world paddy cultivation. Xinzhou in Jinshi City is the hometown of Mengjiang nv, a woman of Qing Dynasty who sought her husband thousands of miles away. Nowadays, there are still ruins and remains relevant to Mengjiang nv, such as Mengjiang huan, Jiangnv Temple, Wangfu Terrrace, Mirror Stone, and Embroidered Bamboo. Xinzhou is also the hometown of Cheyin, the Minister of Appointments in the Xiaowu Era of Eastern Jin Dynasty, who studied under the light from a bag of fireflies, which has always been a classical educational story for generations and generations; Chegong Temple, Firefly Terrace, Yingtai Academy, Tomb of Cheying are still historical sites that attract numerous domestic and international visitors.

Furthermore, Maoli Lake is also the place and carrier of Hunan fishery culture, wetland culture, and farming culture, all of which closely interact with and interdepend on each other, promoting the development of these unique cultures.

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

Description if applicable

To meet the relevant construction requirements and work needs of Maoli Lake Wetland Park Management Office, with the strong promotion and training of Maoli Lake Wetland Park Management Office, strict ecological species breeding standards were adopted, the mode of human release and natural breeding was carried out, and the amount of pesticides and fertilizers was strictly controlled, which basically reduced and avoided the pollution of agricultural non-point source pollution to the lake area, and the water quality of Maoli Lake was greatly improved. Through strict control of farmers and aquaculture enterprises, strict ecological fishery measures have been widely adopted in the lake area and surrounding aquaculture ponds to avoid corresponding pollution. Farmers also benefit from this.

Because the construction of Maoli Lake Wetland Park has also promoted the development of sightseeing and rural tourism in surrounding rural communities, bringing economic benefits to local residents and villagers.

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

Yaoshan Temple near Maoli Lake is the key religious activity site in Hunan Province, which has been ranked as the national intangible cultural heritage, national important temple, and one of the most famous Zen temples. Yaoshan Temple originated in Tang Dynasty and was the land for Zen when Zhuxi, a famous monk in Tang Dynasty, preached and taught Buddhism ideology here, making it the important ancestral temple of Zen and the origin of Caodong zong's Dharma lineage. Since Song Dynasty, Caodong zong has his followers in Japan, Korea, and Southeast Asia. With the development of Zen around the globe, its influence is further spreading toward Europe and America.

Maoli Lake Wetland ecosystem has greatly underpinned the development of Zen in Yaoshan Temple. With such ecological environment, Yaoshan Zen has evolved a discipline and a life philosophy of "not eating without working," a unique characteristic. These monks use a sustainable and ecological way to cultivate rice and herbs, practicing Zen in the actual life. Meanwhile, Yaoshan also bequeathed a lot of religious stories of Zen, such as Yaoshan returning money to civilians, the blossoming and withering trees, Li-ao inquiring for direction.

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: The Maoli Lake Wetland Park Management Office, Jinshi City, Hunan

Provide the name and/or title of the person or people with responsibility for the wetland: The director of the management office

Postal address: No.75 Datong Road, Jinshi City 415400, Hunan

E-mail address: 490625654@qq.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
Tourism and recreation areas	Low impact		☐	☑

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Low impact		☑	☐
Dredging	Low impact		☑	☐
Water releases	Low impact		☑	☐
Canalisation and river regulation	Low impact		☑	☑

Agriculture and aquaculture

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

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	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	Medium 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		☑	☑

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Dams and water management/use		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	Medium impact		☑	☑

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Agricultural and forestry effluents	Low impact		☑	☑
Garbage and solid waste	Low impact		☑	☑
Household sewage, urban waste water		Low impact	☐	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	Low impact		☑	☐
Droughts	Low impact		☑	☑
Temperature extremes	Low impact		☑	☑
Storms and flooding	High 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	Maoli Lake Wetland Park, Jinshi City, Hunan	http://www.gov.cn/zwgk/2013-06/05/content_2420031.htm	partly

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	Partially implemented
Habitat manipulation/enhancement	Implemented
Hydrology management/restoration	Partially implemented
Re-vegetation	Implemented
Soil management	Partially implemented
Land conversion controls	Partially implemented
Faunal corridors/passage	Partially implemented

Species

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

Human Activities

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

Other:

(1) Emphasize the construction of a professional panel with complete operational mechanism

In August 2013, to comprehensively promote ecological conservation and wise use of Maoli Lake, the Municipal Party Committee and the government of Jinshi City established the Maoli Lake National Wetland Park Management Office.

（2）Promote the co-construction and sharing of wetlands and enhance regional benefits.

The work of "two demolition and two returnings" in the lake area was carried out, and 11 million yuan was invested to dismantle all 11,900 cages and 17,000 meters of fences in the lake body; 10 million yuan was invested to demolish 9 dikes and dams in the lake. Fertilizer fishery was completely banned, and 18.7 million yuan was invested to return ponds to lakes and fields to wetland. 790 intensive fishponds along the lake were returned and converted into aquatic cash crops, and more than 14,000 mu of water surface and wetlands were returned.

(3) Carry out joint law enforcement and strengthen normal patrol.

Jinshi City takes the lead in formulating the Implementation Plan for Comprehensive Improvement of Ecological Environment of Maoli Lake in Jinshi City and establishes a comprehensive law enforcement team for ecological environment improvement in Maoli Lake, which is composed of Wetland Management Office, Ecological Environment Substation, Water Conservancy Bureau, Agriculture and Rural Bureau, Forestry Bureau, Natural Resources Bureau, Transportation Bureau and Forest Public Security Bureau. Also, the government is dedicated to combating all kinds of violations of laws and regulations that threaten the ecological environment of Maoli Lake and continues to maintain a good momentum of ecological and healthy development of Maoli Lake; At the same time, led by the city leaders, a leading group for comprehensive law enforcement of ecological environment improvement in Maoli Lake was set up to continuously strengthen the normal law enforcement patrol work of wetland protection.

(5)Carry out popular science education matrix and strengthen protection awareness.

There is an exhibition center building in the Wetland Park, whose main construction area is 1200 square meters. Through the multimedia exhibition center and the picture exhibition room in the center, the functions, biodiversity, beautiful natural scenery, and profound cultural heritage of Maoli Lake Wetland are displayed to visitors through pictures , objects, and films, showing the great achievements of human beings in using and protecting wetlands, striving to improve people's understanding of wetlands and consciously raise awareness of protecting wetlands. In addition, the Wetland Management Office regularly holds theme activities such as "World Wetland Day" and "Wildlife Protection Day", shoots and produces ecological promotional videos, publishes publicity atlas, and increases publicity on wetland protection through media, wetland park official website, and WeChat official account.

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

The Wetland Park Management Office consists of a scientific research monitoring unit and an epidemic disease monitoring stations of terrestrial animals of national importance in Maoli Lake, which is led by the team members of the management office and equipped with 4 monitoring personnel and 6 patrol personnel for monitoring and inspection. At the same time, Wetland Management Office actively cooperates with Chinese Academy of Forestry, Hunan Academy of Forestry, Beijing Forestry University, Central South University of Forestry and Technology, Hunan Normal University and other scientific research institutions or universities inside and outside the province to carry out scientific research monitoring work. Universities such as Central South University of Forestry and Technology and Hunan Normal University have successively established teaching and research bases in Maoli Lake. In addition, the office also cooperates with the provincial central station to carry out on-site sampling of bird feces and carry out monitoring of bird epidemic diseases every year; Since 2021, Qian Fawen, an associate researcher at the Institute of Forest Ecological Environment and Protection of the Chinese Academy of Forestry and executive deputy director of the National Bird Environmental Records Center, went deep into the Maoli Lake National Wetland Park in Hunan Province for on-site investigation. The ecological environment, bird migration, bird protection and wetland bird population of Maoli Lake were investigated and studied, and the scientific research and monitoring work of Maoli Lake Wetland Park was given on-site guidance.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

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ZHAO Er-Mi, HUANG Mei-hua, Zong Yu, et al.1998. Zoology of China. Reptile. Vol. 3: Scale. Serpenta [M]. Science Press, Beijing (in Chinese).
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Liu Xueqin.Study on food composition and food web of lake benthos [D]. Wuhan: Institute of Hydrobiology, Chinese Academy of Sciences, 2006.
[19] Zhang Huan. Study on nutritional niche and food web structure characteristics of fish in shallow lakes [D]. Beijing: University of Chinese Academy of Sciences, 2013.
[20] National Forestry and Grassland Administration, Ministry of Agriculture and Rural Affairs of the People's Republic of China. The List of National Key Protected Wildlife [EB/OL], (2021-09-07). www.gov.cn/zhengce/2021-09/07/content_5727413.htm

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<1 file(s) uploaded>

ii. a detailed Ecological Character Description (ECD) (in a national format)
<1 file(s) uploaded>

iii. a description of the site in a national or regional wetland inventory
<1 file(s) uploaded>

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:


Tundra Swan (*Lei Gang, 23-12-2019*)


Egrets Skittering over the water (*Hunan Jinshi Maoli National Wetland Park Management Office, 10-06-2016*)


Wetland Scene (*Hunan Jinshi Maoli National Wetland Park Management Office, 23-09-2015*)


Maoli Lake Education Center (*Hunan Jinshi Maoli National Wetland Park Management Office, 20-11-2022*)


Wetland Scene (*Zhou Bingjian, 18-04-2018*)


Maoli Lake, Spring (*Hunan Jinshi Maoli National Wetland Park Management Office, 10-06-2016*)


Volunteer activity (*Hunan Jinshi Maoli National Wetland Park Management Office, 02-02-2021*)


Scaly-sided Merganser (*Hunan Jinshi Maoli National Wetland Park Management Office, 02-03-2020*)


Black Stork (*Hunan Jinshi Maoli National Wetland Park Management Office, 02-03-2016*)


Law enforcement and Patrolling (*Hunan Jinshi Maoli National Wetland Park Management Office, 02-02-2021*)

6.1.4 - Designation letter and related data

Designation letter
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Date of Designation 2022-10-28