

Ramsar Information Sheet

Published on 3 August 2017 Update version, previously published on : 2 February 2008

China **Guangdong Haifeng Wetlands**



Designation date Site number

2 February 2008 1727 Coordinates 22°55'51"N 115°24'55"E Area 11 590,50 ha

https://rsis.ramsar.org/ris/1727 Created by RSIS V.1.6 on - 18 May 2020

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

Guangdong Haifeng wetlands are located along the coast of the South China Seas within Haifeng County, Shanwei City, Guangdong Province. Influenced by the previous crustal movements (such as folds, cracks, volcanic rocks uplift), the geomorphology exhibits a saddle-shaped configuration from northwest to southeast. It is typical among the south subtropical marine coastal wetlands and reservoir wetlands in China. Haifeng wetlands comprise of Gongping District, Dahu District and Dongguan Lian'anwei District. These three parts are linked by the water system of Huangjiang River. The Site is a home and wintering ground for numerous threatened bird species such as the endangered Blackfaced Spoonbill (Platalea minor), Marbled Murrelet (Brachyramphus marmoratus), Oriental Stork (Ciconia boyciana), Yellow-breasted Bunting (Emberiza aureola), Eastern Curlew (Numenius madagascariensis), Nordmann's Greenshank (Tringa guttifer) and the vulnerable Greater Spotted Eagle (Aquila clanga). It is an important habitat for waterfowls in south China and thus is appraised as "hometown of Chinese waterfowls".

Except for flood moderating and lessening flood disasters, the wetlands could also play important roles in maintaining high water quality, regulating and stabilizing regional climate. They are essential guarantees for local economy's sustainable development. Gongping reservoir supplies water resource for industry, agriculture and drinking, also for generating electricity and aquiculture. The estuaries, bays and shallow sea area in Dahu and Dongguan Lian'anwei districts can provide bases for aquiculture.

2 - Data & location

- 2.1 Formal data
- 2.1.1 Name and address of the compiler of this RIS

Compiler 1

Name	Shoumian XIE
Institution/agency	Administration Bureau of Guangdong Haifeng Birds Provincial Nature Reserve
Postal address	West side of Laoxizha Bridge Haili Avenue Haifeng County, 516400 Guangdong Province P.R. China
E-mail	nlbhq@sina.com
Phone	+86 660 6891955
Fax	+86 660 6212428

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

From year	2007
To year	2014

2.1.3 - Name of the Ramsar Site

Official name (in English, French or	
	Guangdong Halteng Vietlands
Spanish)	

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A Changes to Site boundary Yes O No O

(Update) B. Changes to Site area No change to area

2.1.5 - Changes to the ecological character of the Site

^(Update) 6b i. Has the ecological character of the Ramsar Site (including no applicable Criteria) changed since the previous RIS?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps 0

Boundaries description

The boundary of wetland is the same as that of the existing nature reserve. Dongguan Lian'anwei District: The boundary of the district is Chang Sha Wan beaches and some marine areas in the south, Xizha Station in the north, the Haifeng county boundaries in the east, Dongao and Dongjiaya village of Meilong Town in the west.

Gongping District: The boundary line is the dike in the south, Haifeng-Zijin highway in the west, the distribution of villages in the east and north, according to artificial division.

Dahu District: It lies Shuizha and Luohe of Haifeng county boundary in the north, Maozhouliao of Chikeng Town in the west, according to roads, rivers, drain lines, the highway by the foot of the northern Donghaiwan mountain, Luodi mountain, Heng mountain and Magong mountain, and Jieshiwan outside the boundary line from the beach area 300 m in the south.

2.2.2 - General location

a) In which large administrative region does the site lie?	It is in Shanwei City.
b) What is the nearest town or population	Haifeng County.

a) Does the wetland extend onto the territory of one or more other countries? Yes O No $\textcircled{\sc ontries}$

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha):	11590.5
Area, in hectares (ha) as calculated from GIS boundaries	11591.96

2.2.5 - Biogeography

Biogeographic regions					
Regionalisation scheme(s)	Biogeographic region				
Udvardy's Biogeographical Provinces	Tropical humid forests, South Chinese Rainforest Biogeographic Province, Indomalayan 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

Other ecosystem services provided	Wetlands here have multiple functions including flood regulation, aquaculture, water supply, climate regulation, water quality purifying, tourism promotion, scientific research and education. The site is not only an important breeding habitat for winter and summer migratory birds, but also of great importance in regulating regional climate, declining regional flood harm and conserving regional ecological security. It is an important guarantee to local economy's sustainable development.
Other reasons	Haifeng wetland has diverse wetland types. It is mainly composed of tidal flats, reservoirs, ponds, estuarine waters, estuarine delta waters, aquacultural ponds, intertidal mangrove wetlands, shallow sea waters, sand beaches, gravel/scree beaches, permanent river ponds, etc. The area of wetlands covers 68.34% of the total reserve. Different types of wetlands together constitute the complex compound wetland ecosystem, which is a typical representative of south China's subtropical offshore and coastal wetlands and an important part of South China Sea ecosystems.

☑ Criterion 2 : Rare species and threatened ecological communities

Criterion 4 : Support during critical life cycle stage or in adverse conditions

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	40000
Start year	2011
Source of data:	The monitoring data from the reserve

☑ Criterion 6 : >1% waterbird population

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	Common name	Species qualifies under criterion 2 4 6 9	Spectorite contrite und criter	cies butes der rion 7 8	op. ize Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds									1	1		
CHORDATA / AVES	Accipiter gentilis	Northern Goshawk									National Protection Class: II	Crit 4: Wintering in the site
CHORDATA / AVES	Aquila clanga	Greater Spotted Eagle								N	National Protection Class: II	Crit 4: Wintering in the site
CHORDATA / AVES	Brachyramphus marmoratus	Marbled Murrelet						EN Str				Crit 4: Wintering in the site
CHORDATA / AVES	Ciconia boyciana ڇ 🔍 🏓	Oriental Stork; Oriental White Stork	ØOOO					EN Str	X	V	National Protection Class: I	
CHORDATA / AVES	Ciconia nigra 📲 🛄 💫	Black Stork									National Protection Class: I	Crit 4: Wintering in the site
CHORDATA / AVES	Emberiza aureola	Yellow-breasted Bunting						EN Str		Ø		Crit 4: Wintering in the site
CHORDATA / AVES	Falco tinnunculus	Common Kestrel; Eurasian Kestrel									National Protection Class: II	Crit 4: Wintering in the site
CHORDATA / AVES	Numenius madagascariensis 🌄 🚉 💫	Eastern Curlew; Far Eastern Curlew	ZZOO					EN Star		V		Crit 4: Wintering in the site
CHORDATA / AVES	Pelecanus crispus 🛃 🛄 🔌	Dalmatian Pelicar	°₹₹₹₽			2 2011-2013	2	VU ●\$* ◎\$\$	×	ø	National Protection Class: II	Crit 4: Wintering in the site; Crit 6: 1 % threshold for E, SE Asia is 100 as of 2012 and the population size is the average over the three winters counted.
CHORDATA / AVES	Phalacrocorax pelagicus Paga Magaalaan	Pelagic Cormorant									National Protection Class: II	Crit 4: Wintering in the site
CHORDATA / AVES	Platalea leucorodia 📲 🛄 💫	Eurasian Spoonbill									National Protection Class: II	Crit 4: Wintering in the site
CHORDATA / AVES	Platalea minor 🎇 💁 🤌	Black-faced Spoonbill				73 2011-2013	3.6	EN Str		V	National Protection Class: II	Crit 4: Wintering in the site; Crit 6: 1 % threshold 2000 as of 2012 and the population size is the average over the three winters counted.
CHORDATA / AVES	Tringa guttifer 📲 🛄 🔌	Nordmann's Greenshank	Ø Ø 🗆 🗆					EN Str	×	Ø	National Protection Class: II	Crit 4: Wintering in the site

1) Percentage of the total biogeographic population at the site

Criterion 4:

The site is located at the global migratory birds' important migrating route in East Asia, and is an important part of the natural reserve network of birds and wetland typology of South China Sea in the Asia-Pacific region. Also, it is one of a few nature reserves for birds along the southeast coast of China. Each year, at least 80 species of migratory birds overwinter in this site (see Appendix 1). The wetlands provide critical refuge and inhabiting place for global endangered waterfowls.

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

Dahu District and Dongguan Lian'anwei District are both located at the estuaries of rivers into the sea, with large areas of coastal beaches, intertidal belts, shallow water areas, a few mangrove forests and artificial ponds, which provide suitable habitats for wildlife to live and search for food. Mangrove forests and surrounding forests provide necessary habitats for waterfowl species including Anseres, Charadriiformes, Lariformes, Herons.

Gongping reservoir mainly consists of wildlife habitats such as freshwater areas, small islands and surrounding foothills. Plant species in the surroundings mainly include Dicranopteris pedata, Rhodomyrtus tomentosa, Melasoma candidum, Glochidion puberum, Erigeron acer. Wetland herbaceous plants mainly include Fimbristylis miliacea communities. This reservoir provides important habitats for waterfowls including Podiceps cristatus, Milvus korschun, Phalacrocorax carbo, Ardeidae, Anseries.

The abundant water and aquaculture resources within the reserve serve as major economic supports of local community and the reserve itself. Besides, the beautiful landscapes and unique wildlife resources provide advantages for the eco-tourism promotion and the reserve's development.

4.2 - What wetland type(s) are in the site?

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters		0	20	
E: Sand, shingle or pebble shores				
F: Estuarine waters		3	1410.3	Representative
G: Intertidal mud, sand or salt flats		4	1360.58	Representative
H: Intertidal marshes		0	151.03	Representative
I: Intertidal forested wetlands				

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 >> Mt Permanent rivers/ streams/ creeks		0	87.03	

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
1: Aquaculture ponds		2	2517.94	
2: Ponds				
6: Water storage areas/Reservoirs		1	3039.44	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Acanthus ilicifolius		
Acrostichum aureum		
Aegiceras corniculatum		
Bruguiera cylindrica		
Excoecaria agallocha		
Kandelia candel		
Pluchea indica		
Pongamia pinnata		
Rhizophora stylosa		

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Accipiter soloensis	Chinese Sparrowhawk;Gray Frog- Hawk				National Protection Class: II
CHORDATA/AVES	Aixgalericulata	Mandarin Duck				National Protection Class: II
CHORDATA/AVES	Asio flammeus	Short-eared Owl				National Protection Class: II
CHORDATA/AVES	Buteo buteo	Common Buzzard				National Protection Class: II
CHORDATAAVES	Buteo lagopus	Roughleg;Rough-legged Buzzard;Rough-legged Hawk				National Protection Class: II
CHORDATA/AVES	Centropus bengalensis	Lesser Coucal				National Protection Class: II
CHORDATA/AVES	Centropus sinensis	Greater Coucal				National Protection Class: II
CHORDATA/AVES	Circus aeruginosus	Western Marsh Harrier				National Protection Class: II
CHORDATA/AVES	Circus cyaneus	Northern Harrier				National Protection Class: II
CHORDATA/AVES	Circus melanoleucos	Pied Harrier				National Protection Class: II
CHORDATA/AVES	Circus spilonotus	Eastern Marsh Harrier				National Protection Class: II
CHORDATA/AVES	Cygnus columbianus	Tundra Swan				National Protection Class:
CHORDATA/AVES	Dupetor flavicollis	Black Bittern				National Protection Class: II
CHORDATA/AVES	Egretta sacra	Pacific Reef Heron				National Protection Class: II
CHORDATA/AVES	Elanus caeruleus	Black-winged Kite				National Protection Class: II
CHORDATA/AVES	Falco columbarius	Merlin				National Protection Class: II
CHORDATA/AVES	Falco peregrinus	Peregrine Falcon				National Protection Class: II
CHORDATA/AVES	Falco subbuteo	Eurasian Hobby;Northern Hobby				National Protection Class: II
CHORDATA/AVES	Grus grus	Common Crane				National Protection Class: II
CHORDATA/AVES	Haliastur indus	Brahminy Kite				National Protection Class: II
CHORDATA/AVES	Harpactes erythrocephalus	Red-headed Trogon				National Protection Class: II
CHORDATA/AVES	Lophura nycthemera	Silver Pheasant				National Protection Class: II
CHORDATA/AVES	Ninoxscutulata	Brown Hawk-Owl				National Protection Class: II
CHORDATA/AVES	Pandion haliaetus	Osprey;Western Osprey				National Protection Class: II
CHORDATA/AVES	Spilornis cheela	Crested Serpent Eagle				National Protection Class: II
CHORDATA/AVES	Thalasseus bergii	Great Crested Tern;Greater Crested Tern				National Protection Class: II
CHORDATA/AVES	Tylo capensis longimembris	Eastern Grass-owl				National Protection Class: II
CHORDATAMAMMALIA	Lutra lutra	European Otter				National Protection Class: II

4.4 - Physical components

4.4.1 - Climate What is the Site like?, S4 - Page 2

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

4.4.2 - Geomorphic setting

a) Mnimum elevation above sea level (in metres)	
a) Maximum elevation above sea level (in metres) 300	
Entire river basin	
Upper part of river basin	
Mddle part of river basin	
Lower part of river basin 🗹	
More than one river basin \Box	
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.

Huangjiang River Basin

4.4.3 - Soil

 Mneral
 ✓

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

 Organic
 ✓

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

 Organic
 ✓

 No available information
 □

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

 Please provide further information on the soil (optional)

Over 10 types of soil can be found, including lateritic red soil, paddy soil, coastal solonchak, coastal aeolian soil, bog soil, and Litho soil, etc. The topsoil is thick, composed of a relatively thick humus layer, a medium amount of organic matters with a good soil structure. Dahu District is composed of an estuary and shallow ponds, mudflats, sand beaches and paddy fields. The parent material of the soil is mainly marine sediment. The soil type is marsh soil and saline paddy soil which is thick and fertile.

Dongguan Lian'anwei District is mainly a kind of reclaimed wetland in the coastal delta region. The parent material of soil is marine deposit which produced mainly marsh soil here marked with thich layer and fertility.

Gongping District is composed of Gongping Reservoir and its surrounding terraces. The parent materials of soil within this district are mainly granite and sandstone.

4.4.4 - Water regime

Water permanence	
Presence?	Changes at RIS update
Usually permanent water	
present	

Source of water that maintains character of the site		
Presence?	Predominant water source	Changes at RIS update
Marine water		No change
Water inputs from surface water	X	No change

Water destination

Presence?	Changes at RIS update
Feeds groundwater	No change
To downstream catchment	No change
Marine	No change

Stability of water regime		
Presence?	Changes at RIS update	
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.

Located in a low-latitude region, the coastal Guangdong areas experience strong solar radiation, long coastline and numerous estuaries and bays. The mean water surface temperature ranges from 21 to 27 I with seasonal variations. The maximal water temperature is 34-35.6 I, while the minimal water temperature is 6-10 I. The variation of the sea water's salinity and distribution were mainly influenced by the tidal. The mean annual surface salinity is 27.83‰ while the mean annual near-bottom salinity is 30.23‰. The sea water is less saline in summer than in winter. The 67 km Huangjiang River is the major river in this area, passing through 16 villages and towns in Haifeng before entering Changsha Bay. Six large bays, namely, Changsha Bay, Gaoluo Bay and Jiulong Bay are found in middle and lower Huangjiang River.

4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site 🜌

Sediment regime unknown

4.4.6 - Water pH

Circumneutral (pF	l: 5.5-7.4) 🗹
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(Update) Changes at RIS update No change
Increase O Decrease O Unknown O

Unknown 🗖

4.4.7 - Water salinity

Mixohaline (brackish)/Mixosaline (0.5-30 g/l) 🖉

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

Unknown 🛛

4.4.8 - Dissolved or suspended nutrients in water

Mesotrophic 🗹

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

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 i) broadly similar O ii) significantly different I site itself.

Surrounding area has greater urbanisation or development $\hfill\square$

Surrounding area has higher human population density \Box

Surrounding area has more intensive agricultural use \Box

Surrounding area has significantly different land cover or habitat types ${\ensuremath{\overline{\textit{W}}}}$

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)	Low
Fresh water	Drinking water for humans and/or livestock	Medium
Fresh water	Water for irrigated agriculture	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Low
Erosion protection	Soil, sediment and nutrient retention	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium
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	Nature observation and nature-based tourism	Low
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	Medium
Scientific and educational	Major scientific study 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	Medium
Soil formation	Accumulation of organic matter	Medium
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium

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

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 Duse that maintain the ecological character of the wetland
- ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
 - iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
- iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

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	V	Ø		

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

Within the Ramsar Site: State ownership. The nature reserve has management right; The local residents and collectivities have right to use the lands.

In the surrounding area: State ownership. The right of use belongs to local collectivities and individuals.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:	Administration Bureau of Guangdong Haifeng Provincial Birds Nature Reserve
Provide the name and title of the person or people with responsibility for the wetland:	Fulie ZHUO, Director
Postal address:	West side of Laoxizha Bridge Haili Avenue Haifeng County, 516400 Guangdong Province P.R. China
E-mail address:	nlbha@sina.com

5.2 - Ecological character threats and responses (Management)

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Marine and freshwater aquaculture			×			

Biological resource use						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	Low impact			No change	V	No change

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Reserve in China	Guangdong Haifeng Provincial Birds Nature Reserve		whole

5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve 📝

- Ib Wilderness Area: protected area managed mainly for wilderness protection
 - Il 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

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

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Improvement of water quality	Partially implemented
Habitat manipulation/enhancement	Implemented

Species

Measures	Status
Threatened/rare species	Implemented
management programmes	implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Partially implemented
Fisheries management/regulation	Partially implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

5.2.5 - Management planning

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

Has a management effectiveness assessment been undertaken for the site? Yes O No O

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No () processes with another Contracting Party?

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

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

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Chen Junqin, Chen Guizhu and He Weitian, 2005, Guangdong and Macao wetlands, Macao Ecological Society. "Haifeng County". 1985, 2005. The project planning of Guangdong Province wetlands protection. 2005. Udvardy M. 1975. Classification of the Biogeographical Provinces of the World. IUCN Occasional Paper No. 18.

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) <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

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:





waterfowls in the site (The reserve, 15-04-2012)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2008-02-02