

# Ramsar Information Sheet

Published on 25 November 2015

# China

# Zhangye Heihe Wetland National Nature Reserve



Designation date 16 October 2015

Site number 2246

Coordinates 39°29'56"N 99°46'10"E

Area 41 164,56 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 (This field is limited to 2500 characters)

Zhangye Heihe Wetland National Nature Reserve (ZHWNNR) is located along the Heihe River, the second largest inland river of China, and on the plains of the famous Gansu Corridor. Situated in the transition zone between the Qinghai-Tibet and the Mongolian Plateau, the Site is rich with a variety of geomorphologic landscapes such as glaciers and snowy mountains, forests and grasslands, deserts and oasis, Red Landform (Danxia Landform), and is dominated by aquatic systems such as natural rivers, lakes, swamps and meadows. These wetlands are representative of the Takla-Makan-Gobi Desert Biogeographic Province and the deserts of northwest China. A variety of rare and endangered birds such as baer's pochard (Aythya baeri), saker falcon (Falco cherrug), relict gull (Larus relictus) inhabits in the Heihe River and floodplains around it. The Site provides an important breeding ground and stopover for migratory birds along the route between Central Asia and India, to northwest China. The reserve is the largest breeding habitat for black stork (Ciconia nigra) in East Asia, with a stable population of above 300 every year while the highest recorded was at above 500. With the extremely vulnerable state of ecological environment of the temperate desert, ZHWNNR is the region 's largest oasis zone that plays a critical role in regulating surface runoff, storing floodwater and mitigating drought impacts, supporting regional biodiversity, and purifying water.

## 2 - Data & location

#### 2.1 - Formal data

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

Name Quanmin ZHOU, Maolin DENG, Guangzu YANG Institution/agency | Administration Bureau of Zhangye Heihe Wetland National Nature Reserve Postal address (This field is limited to 254 characters) 13 XianFu South Street Ganzhou District, 734000 **Zhangye City** Gansu Province P.R. China zyssdglj@126.com +86 936 8800911

Fax +86 936 8222181

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

From year 2013 To year 2014

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish) Zhangye Heihe Wetland National Nature Reserve

#### 2.2 - Site location

#### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

Boundaries description (optional) (This field is limited to 2500 characters)

The Site boundary is the same as ZHWNNR, mainly along the middle reach of Heihe River, east to Shanggin Town of Ganzhou District, west to Jiuquan City, south to Qilian Mountain and north to Heli and Longshou Mountains, adjacent to the Inner Mongolia Autonomous Region.

#### 2.2.2 - General location

a)	In	which	large	administrative	region	does
					the sit	e lie?

Zhangye City in Gansu Province

centre? Town.

b) What is the nearest town or population The nearest towns along the Heihe River are Heiguan Town, Heli Town, Pingchuan Town, Bangiao Town and Wujiang

### 2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes O 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): 41164.56

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

41191.97

#### 2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Cold-winter (continental) desert and semideserts, Takla-Makan-Gobi Desert 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 (This field is limited to 3000 characters)

ZHWNNR captures the major flowing area of Heihe River, the catchment area of which amounts to 210 000 ha. The Site not only serves as an upstream pool with water storage of about 2.06 billion cubic meters, but also maintains environmental flow downstream, protects biodiversity, and maintains ecological security in north-western China.

Other ecosystem services provided (This field is limited to 3000 characters)

ZHWNNR is located in the desert area of north-western China and has a total wetland area of 29231.54 ha with permanent rivers, inland salt marshes, freshwater marshes and other wetland types in it. The Site is representative of the typical near-natural inner river ecosystems in the 100 million ha range of the Gobi Desert and Tengger Desert.

- ☑ 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 21900 in 2013, 73000 in 2014

Start year 2013

Source of data: Monthly monitoring data provided by ZHWNNR administration

☑ 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 2	qualifie 4	s under o	criterion 9	Species 3	contribut 5	es under 7	criterion 8	Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA / AVES	Anser anser	Greylag Goose			<b>✓</b>						9893	2013-2014	13.93	LC o rep				Crit 6: 1 % threshold for East Asia (non-bre) is 710 as of 2012. Population size: 9361 in 2013 10425 in 2014
CHORDATA / AVES	Anser fabalis	Bean Goose			<b>√</b>						60	2014	2	LC offer				Crit 6: 1 % threshold for Sayan/East Asia is 30 as of 2012.
CHORDATA / AVES	Ardea cinerea	Gray Heron;Grey Heron		<b>√</b>										LC offer				Stopover and breeding site Population size: 63 in 2013 265 in 2014
CHORDATA /	Aythya baeri	Baer's Pochard	<b>√</b>											CR 會際		<b>✓</b>		Stopover and breeding site
CHORDATA / AVES	Aythya nyroca COL	Ferruginous Duck		<b>✓</b>							217	2014		NT ⊚ NSF		✓		Stopover and breeding site
CHORDATA / AVES	Ciconia nigra	Black Stork		<b>✓</b>	<b>√</b>						514	2013-2014	514	LC 画際		Na Na	ational Protection Class: I	Crit 4: Stopover and breeding site Crit 6: 1 % threshold for East Asia (non-bre) is 1 as of 2012. Population size: 504 in 2013 524 in 2014
CHORDATA / AVES	Cygnus columbianus	Tundra Swan			<b>✓</b>						8109	2014	8.1	LC ON		Na	ational Protection Class: II	Crit 4: Wintering ground Crit 6: 1 % threshold for East Asia is 1000 as of 2012. Population size: 8 in 2013 8109 in 2014
CHORDATA / AVES	Cygnus cygnus COL	Whooper Swan		<b>✓</b>	<b>√</b>						1500	2013-2014	2.5	LC ON		Na	ational Protection Class: II	Crit 4: Wintering ground Crit 6: 1 % threshold for East Asia is 600 as of 2012. Population size: 2017 in 2013 983 in 2014
CHORDATA / AVES	Falco cherrug	Saker Falcon	<b>√</b>								67	2014		EN @ LIST		Na	ational Protection Class: II	Population size: 6 in 2013 67 in 2014

Dhadaa	0-1	0	Species	qualifies	s under o	criterion	Species	contribut	tes under	criterion	D 0:	Desired of the East	0/	ILION De al Lieu	OITEO Assessable L	OMO A	Other Otel	h060
Phylum	Scientific name	Common name	2	4	6	9	3	5	7	8	Pop. Size	Period of pop. Est	. % occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA / MAMMALIA	Gazella subgutturosa	Goitered gazelle	✓											VU ⊚ TEP			National Protection Class: II	
CHORDATA / AVES	Grus grus	Common Crane			<b>√</b>						178	2013-2014	1.19	LC @ rep			National Protection Class: II	Crit 6: 1 % threshold for Central China (non-bre) is 150 as of 2012. Population size: 86 in 2013 270 in 2014
CHORDATA / AVES	Haliaeetus leucoryphus COL Leycopasu ID	Pallas's Fish Eagle	<b>√</b>											VU ⊚ REF		<b>✓</b>	National Protection Class: I	
CHORDATA / AVES	Ichthyaetus relictus	Relict Gull	<b>√</b>								12	2014		VU @ LEF	<b>✓</b>	✓	National Protection Class: I	Stopover and breeding site Population size: 12 in 2013 11 in 2014
CHORDATA / AVES	Limosa limosa	Black-tailed Godwit		<b>√</b>							2	2014		NT @ LEF				Stopover and breeding site Population size: 2 in 2013 2 in 2014
CHORDATA / AVES	Numenius arquata	Eurasian Curlew		<b>√</b>							2	2014		NT ② NBY				Stopover and breeding site Population size: 2 in 2013 2 in 2014
CHORDATA /	Otis tarda	Great Bustard	<b>√</b>											VU ⊚ tsp		<b>√</b>	National Protection Class: I	
CHORDATA / AVES	Platalea leucorodia	Eurasian Spoonbill		<b>√</b>							7	2013		LC @ LEP			National Protection Class: II	Stopover and breeding site

(This field is limited to 2500 characters)

Criterion 4: Several lakes and reservoirs such as Tiancheng Lake, Mingtang Lake and Dahuwan Lake are located in the core area of the Site, formed by spring water from southern mountains. As surface water bodies do not freeze in winter, there are nearly 1500 whooper swans (Cygnus cygnus) that inhabit at the Site from December to February each year. In addition, stretching along the desert fringe of Gansu Corridor, the Site's water and lush vegetation provide refuge from predators, and breeding and stopover ground for black stork (Ciconia nigra), Baer's pochard (Aythya baeri), relict gull (Larus relictus) and other 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

(This field is limited to 2500 characters)

ZHWNNR mainly consists of a large area of inland salt marshes, freshwater marshes and rivers. The vegetation types mainly include Phragmites communis, Glycyrrhiza inflate, Typha spp. etc. Located along the central part of the route for migratory birds in north-western China, the reserve is an important stopover site for a number of species migrating between the Mongolian Plateau and the Tengger Desert, providing them with abundant food. The waterbirds distributed within the Site include storks, cranes, herons, geese, ducks, gulls and etc. Wetland plants are distributed in the Heihe River floodplain, and around the lakes and reservoirs within the Site. The major plant species are phragmites communis, typha spp., karelina caspica, eleocharis valleulosa, scirpus taber naemontoni, leymus secahimus and etc. that provide good breeding and resting habitat for a number of waterfowls including the critically endangered baer's pochard. Also, desert vegetation distributed in the Gobi Desert can be found stretched along the edge of the wetland oasis. The main plant species in this zone are stipa glareosa, ephedra przewalskii, nitraria spp. and etc. These plants provide habitat to desert animals such as goitered gazelle (Gazella subgutturosa) and chukar (Alectoris chukar). In addition, the Site plays an important role in climate regulation and water supply for the surrounding areas.

Please refer to the document CN<u>lit</u>15101.docx under 6.1.2.vi: Other published literature for population count of bird species in 2013 and 2014.

## 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
M: Permanent rivers/ streams/ creeks		3	5179.9	Representative
N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		0	418.8	
O: Permanent freshwater lakes		0	72	
P: Seasonal/ intermittent freshwater lakes		0	572	
R: Seasonal/ intermittent saline/ brackish/ alkaline lakes and flats	Inland salt marsh	1	7655.64	Representative
Ss: Seasonal/ intermittent saline/ brackish/ alkaline marshes/ pools		0	1388	
Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		2	7514.4	Representative
W: Shrub-dominated wetlands		0	1792.3	

#### 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
2: Ponds		0	132.7	
3: Irrigated land		0	2050	
6: Water storage areas/Reservoirs		4	2455.5	

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Grassland	
Sandy land	
Gobi	
Plain glebe	
Open forest land	

## 4.3 - Biological components

### 4.3.1 - Plant species

<no data available>

## 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 gentilis	Northern Goshawk				National Protection Class: II
CHORDATA/AVES	Aquila chrysaetos	Golden Eagle				National Protection Class: I
CHORDATA/AVES	Asio flammeus	Short-eared Owl				National Protection Class: II
CHORDATA/AVES	Asio otus	Long-eared Owl				National Protection Class: II
CHORDATA/AVES	Athene noctua	Little Owl				National Protection Class: II
CHORDATA/AVES	Bubo bubo	Eurasian Eagle-Owl				National Protection Class: II
CHORDATA/AVES	Buteo hemilasius	Upland Buzzard				National Protection Class: II
CHORDATA/AVES	Buteo lagopus	Roughleg;Rough-legged Buzzard;Rough-legged Hawk				National Protection Class: II
CHORDATA/AVES					<u> </u>	)

RIS for Site no. 2246, Zhangye Heihe Wetland National Nature Reserve,	China
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Buteo rufinus

Long-legged Buzzard			

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National Protection Class: II

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	Circaetus gallicus	Short-toed Snake Eagle				National Protection Class: II
CHORDATA/AVES	Circus aeruginosus	Western Marsh Harrier				National Protection Class: II
CHORDATA/AVES	Falco subbuteo	Eurasian Hobby;Northern Hobby				National Protection Class: II
CHORDATA/AVES	Falco tinnunculus	Common Kestrel;Eurasian Kestrel				National Protection Class: II
CHORDATA/MAMMALIA	Felis silvestris	Wildcat				National Protection Class: II
CHORDATA/AVES	Haliaeetus albicilla	White-tailed Eagle				National Protection Class: I
CHORDATA/MAMMALIA	Lynx lynx	Eurasian Lynx				National Protection Class: II
CHORDATA/AVES	Milvus migrans	Black Kite				National Protection Class: II
CHORDATA/AVES	Pandion haliaetus	Osprey;Western Osprey				National Protection Class: II

## 4.4 - Physical components

### 4.4.1 - Climate

Climatic region	Subregion
B: Dry climate	BWk: Mid-latitude desert (Mid-latitude desert)

## 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)	1200
a) Maximum elevation above sea level (in metres)	1500

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Middle part of river basin

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. (This field is limited to 1000 characters)

Heihe River basin

#### 4.4.3 - Soil

Mineral 🔽

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) (This field is limited to 1000 characters)

The major soil types are irrigated soil, alluvial soil, aeolian sandy soil and bog soil. Due to salinization, soil at the Site contains high level of potassium, low organic matter and phosphorus, and medium nitrogen.

#### 4.4.4 - Water regime

#### Water permanence

Presence?

Usually permanent water present

Source of water that maintains character of the site

Presence?	Predominant water source
Water inputs from rainfall	✓
Water inputs from surface water	

#### Water destination

Presence?
Feeds groundwater
To downstream catchment

#### Stability of water regime

Presence?
Water levels largely stable

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology: (This field is limited to 1000 characters)

The main surface water at the Site is Heihe River, which originates from precipitation and snow melt in Qilian Mountain, with an annual trunk stream flow of 11.3 million cubic meters. The surface water amounts to 24.8 billion cubic meters. The total groundwater recharge is 18.5 billion cubic meters and is due to the leakage and undercurrent of Heihe River and other rivers around. Other water bodies at the Site include Mingtang Lake, Tiancheng Lake, Houtou Lake, Mawei Lake, Liujiashen Lake, Jiagou Lake, Dahuwan Lake, Xiaohaizi Reservoir, and Pingchuan Reservoir.

#### 4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site <a>Image: Image of the control of the contr

4.4.6 - Water pH

Alkaline (pH>7.4)

4.4.7 - Water salinity

Unknown 🔽

4.4.8 - Dissolved or suspended nutrients in water

Mesotrophic <a>Image: Image: I

#### 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 i) broadly similar O ii) significantly different © Site differ from the site itself:

Surrounding area has significantly different land cover or habitat types <a>I</a></a>

Please describe other ways in which the surrounding area is different: (This field is limited to 1000 characters)

The surrounding area is different from the Site because it is mainly covered by farmland and Gobi desert.

## 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

**Provisioning Services** 

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	High
Fresh water	Water for industry	Medium
Fresh water	Water for irrigated agriculture	Medium

#### **Regulating Services**

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	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
Hazard reduction	Flood control, flood storage	Medium

#### **Cultural Services**

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Long-term monitoring site	High
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
Nutrient cycling	Carbon storage/sequestration	High

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ⑥ Unknown ○

#### 4.5.2 - Social and cultural values

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

Description if applicable (This field is limited to 2500 characters)

In 1954, the Neolithic ruins (over 4000 years old) were discovered in Sibatan. Zhangye Heihe River is the cradle of history and culture in Gansu Corridor, and is an important post of the Silk Road that connects west with the ancient China.

## 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	✓	✓

#### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	✓	✓

Provide further information on the land tenure / ownership regime (optional): (This field is limited to 1000 characters)

Within the Ramsar Site:

The land within the Ramsar Site is state-owned while the land use right belongs to the national government and collectives. The land use right of 25251.28 ha belongs to the national government and of 15913.28 ha belongs to collectives. Most of the land that collectives use is located in the buffer zone and experimental areas.

In the surrounding area:

The land surrounding the Ramsar Site is state-owned while the land use right belongs to national government and collectives.

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: (This field is limited to 1000 characters)

Administration Bureau of Zhangye Heihe Wetland National Nature Reserve

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

Quanmin ZHOU, Director

Postal address: (This field is limited to 254 characters)

13 XianFu South Street Ganzhou District, 734000 Zhangye City Gansu Province RIS for Site no. 2246, Zhangye Heihe Wetland National Nature Reserve, China

P.R. China

E-mail address: zyssdglj@126.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
Water abstraction	Medium impact		✓	

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops	Medium impact		✓	✓

#### Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	High impact		✓	✓

Please describe any other threats (optional): (This field is limited to 2500 characters)

As an extreme arid region, the Site belongs to fragile ecological environment, with average annual precipitation of only 129 mm yet with average annual evaporation of 2400 mm. Drought, high temperature and strong evaporation lead to a decrease of the desert wetland area causing vegetation degradation and desertification. Especially in recent years, global warming has caused the Qilian Mountains snow line rising and water source reduced.

In addition, population growth and increase in agricultural and domestic water consumption may have an impact on the regional ecological water use. Surrounding farmland reclamation also has a certain effect on the wetland.

## 5.2.2 - Legal conservation status

#### National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Reserve	ZhangyeHeiheWetlandNationalNatureRese		whole

## 5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve 🗹

## 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	Partially implemented
Hydrology management/restoration	Partially implemented
Re-vegetation	Partially implemented

#### **Human Activities**

Measures	Status
Regulation/management of wastes	Partially implemented
Livestock management/exclusion (excluding fisheries)	Partially implemented

### 5.2.5 - Management planning

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

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

O

#### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

### 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

(This field is limited to 2500 characters)

Please refer to the document CNlit1510.docx under 6.1.2.vi Other published literature.

#### 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file availables

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<2 file(s) uploaded>

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

Please provide at least one photograph of the site:



Wetland landscape (The reserve, 09-09-2014)



Waterfowls wintering at the Site ( The reserve, 17-12-2014



Population of Cygnus cygnus wintering at the Site (The reserve, 17-12-2014)

## 6.1.4 - Designation letter and related data

#### Designation letter

<1 file(s) uploaded>

Date of Designation 2015-10-16