



# Ramsar Information Sheet

Published on 6 August 2018

## China

### Inner Mongolia Grand Khingan Hanma Wetlands



Designation date	8 January 2018
Site number	2351
Coordinates	51°35'20"N 122°38'01"E
Area	107 348,00 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

Located at the northern part of the western slope of Grand Khingan Mountains, the Site is one of the most well-preserved Cold temperate coniferous forest areas in China, where the zonal vegetation is the tundra mountain bright coniferous forest. Distribute along the Taliya River and its tributaries. The Site is an inland wetland and aquatic ecosystem dominated with marshes, rivers and lakes. A large area of *Larix gmelinii* bogs and *Sphagnum* bogs in the Site are typically representative in the biogeographical area and East Asia. With dense marshes of forest, shrub, herb and moss, continuous river wetlands, extensive beach wetlands and lush vegetation, the Site keeps an original state. Various types of wetlands support many rare and threatened animals and plants, such as *Chosenia arbutifolia*, *Myriophyllum propinquum*, *Aythya baeri*, *Mergus squamatus*, *Cygnus cygnus*, *Cygnus columbianus*, *Martes zibellina*, *Lepus timidus* and *Moschus moschiferus*. Besides, the Site is also a concentration area and the optimal habitat for *Alces alces* and *Rangifer tarandus* in China.

The Taliya River is the source of Jiliu River, the main tributary of Ergun River upstream of Heilongjiang River. Ergun River runs on the China-Mongolia border and Heilongjiang River runs on the China-Russia border, making it highly internationally important to guarantee the water ecological security of Hanma Wetlands and Taliya River. And, Hanma Wetlands (Hanma Reserve) were among the 51 china demonstration reserves in 2006 and became a UNESCO World Biosphere Reserve in 2015.

Overall, Hanma Wetlands are of great significance to water regulation, water purification, floods and droughts reduction, Jiliu River basin keeping and even the ecological security and rare wildlife resources of the entire Heilongjiang River Basin and Northeast Asia.

## 2 - Data & location

### 2.1 - Formal data

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

##### Compiler 1

Name	Kun YANG
Institution/agency	Administration Bureau of Inner Mongolia Grand Khingan Hanma National Natural Reserve
Postal address	Jinhe Town, Genhe City, Inner Mongolia, P.R. China
E-mail	363161937@qq.com
Phone	+86 470 5476553
Fax	+86 470 5476332

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

From year	2009
To year	2016

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Inner Mongolia Grand Khingan Hanma Wetlands
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## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

Former maps	0
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#### Boundaries description

The boundary of the Ramsar Site is the same as that of Inner Mongolia Grand Khingan Hanma National Nature Reserve. The Site is located at the northern part of the western slope of Grand Khingan Mountains, east to Heilongjiang Huzhong National Nature Reserve, west to Xiushan and Sahe Forest Farm of Jinhe Forestry Bureau, south to Ganshang Forest Farm of Ganhe Forestry Bureau, north to Anan and Abei Forest Farm of Alongshan Forestry Bureau.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	In Genhe City, Hulunbuir City, Inner Mongolia Autonomous Region
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b) What is the nearest town or population centre?	Jinhe Town
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### 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): 107348

Area, in hectares (ha) as calculated from GIS boundaries 107432.11

### 2.2.5 - Biogeography

Biogeographic regions

RIS for Site no. 2351, Inner Mongolia Grand Khingan Hanma Wetlands, China

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Temperate broad-leaf forests or woodlands, and subpolar deciduous thickets, Manchu-Japanese Mixed Forest Biogeographic Province, Palaearctic Realm

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

The main wetland types of Hanma Wetlands are marsh and river wetlands. The area of marsh wetlands is 45,413 hectares, accounting for 42.30% of the Site total area. The marsh wetlands, including forest swamps, shrub swamps, herbaceous marshes and moss bogs, mainly distribute in river valley and forest along the Taliya River. A wide variety of marsh wetlands can conserve water, absorb precipitation and permafrosts melt water, reduce flood peak in rainy season, and also provide adequate and stable water supply to the Taliya River.

Taliya River runs throughout Hanma Wetlands from the south to the north with a catchment area of 107348 hectares and 11 primary tributaries, making up a complete leaf venation water system. With numerous branches and meandering attitude, Taliya River often produces ring rivers or oxbow lakes with few human interventions. In addition, existence of permafrost also makes it hard for rivers to cut down, leading to increased lateral erosion and numerous turns that result in unique open valleys. As an important and major river, Taliya River provides necessary water supply for plants of forests and marshes along the river. The continuous water network, being well preserved, plays an important functional role in water supply, flood homogenization and water conservation in Heilongjian Basin in Northeast China and even the entire biogeographic area.

Other ecosystem services provided

There is permafrost existing in Hanma Wetlands. The peat wetlands dominated by *Larix gmelinii* marshes, *Betula fruticosa* marshes and *Sphagnum* swamps were formed under the combined effect of low temperature and rainy climate conditions. It's a typical wetland ecosystem on the edge of the polar tundra with large amounts of peat stored and has a very important carbon sink function which is conducive to easing the trend of global warming. Meanwhile, peatlands play a strong purification function, reducing water pollutants through sedimentation, adsorption, ion exchange and redoxomorphism. The seasonal and interannual depth changes of the permafrost are critical to the surface vegetation there, and this impact is also sensitive to climate changes.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The Ramsar Site lies on the southern edge of the southward extension of Siberian Taiga. The *Larix gmelinii* in this area is the key species constituting the zonal vegetation, cold temperate coniferous forest (Taiga) as well as the principal dominant species throughout the area. *Larix gmelinii* plays a critical role in the formation, succession and eco-function of the various wetland ecosystems. The *Sphagnum* community is the main vegetation type in the peat bogs of the Site. The *Deyeuxia angustifolia* community is the dominant vegetation in the herbaceous marshes. *Populus suaveolens* is one of the key species of vegetation community in river floodplain wetlands. These species contribute positively to stabilizing their wetland ecosystems and giving full play to service functions of wetland ecosystems.





















The diversity of wetland types is of great value to the maintenance of regional biodiversity. The Site supports 620 species of ferns, bryophytes, gymnosperms and angiosperms; 26 fish species, 10 amphibian and reptile species, 203 bird species and 51 mammal species. Among them, there are 3 species belonging to national Class II protected plants; 7 species belonging to national Class I protected animals; 41 species belonging to national Class II protected animals.

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

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Chosenia arbutifolia</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VU 	<input type="checkbox"/>	National Protection Class: II	Crit 4: important habitat for the plant species

### 3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
<b>Birds</b>																		
CHORDATA / AVES	<i>Anser cygnoides</i> 	Swan Goose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>			Crit 4: Migration Stop place
CHORDATA / AVES	<i>Anser erythropus</i> 	Lesser White-fronted Goose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input checked="" type="checkbox"/>			Crit 4: Migration Stop place
CHORDATA / AVES	<i>Aquila clanga</i> 	Greater Spotted Eagle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	National Protection Class II		Crit 4: Breeding ground
CHORDATA / AVES	<i>Aythya baeri</i> 	Baer's Pochard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR 	<input type="checkbox"/>	<input checked="" type="checkbox"/>			Crit 4: Breeding ground
CHORDATA / AVES	<i>Bubo scandiacus</i> 	Snowy Owl	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class II		
CHORDATA / AVES	<i>Emberiza aureola</i> 	Yellow-breasted Bunting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR 	<input type="checkbox"/>	<input checked="" type="checkbox"/>			Crit 4: Breeding ground
CHORDATA / AVES	<i>Mergus squamatus</i> 	Scaly-sided Merganser	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class I		Crit 4: Migration Stop place
CHORDATA / AVES	<i>Numerius madagascariensis</i> 	Eastern Curlew; Far Eastern Curlew	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input checked="" type="checkbox"/>			Crit 4: Breeding ground
<b>Others</b>																		
CHORDATA / MAMMALIA	<i>Moschus moschiferus</i> 	Siberian musk deer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class I		Crit 4: Breeding ground
CHORDATA / MAMMALIA	<i>Rangifer tarandus</i> 	caribou	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>			Crit 4: Habitat

1) Percentage of the total biogeographic population at the site

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

<no data available>

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

### 4.1 - Ecological character

Hanma Wetlands mainly consist of a great area of marshes, rivers and lakes. The vegetation types mainly include *Larix gmelinii*, *Betula fruticosa*, *Chosenia arbutifolia*, *Deyeuxia angustifolia*, *Sphagnum squarrosum*, etc. The Site is an important habitat and a breeding ground for a number of birds in the northeast of China and the East Asian – Australasian Flyway. The wetland birds distributed within the Site include ducks, herons, snipes, storks, etc.

The major edificators of marshes in the Site covered by boggy meadows and plants, include *Larix gmelinii*, *Betula fruticosa*, *Sphagnum squarrosum*, etc. that provide habitats and foraging grounds for wading birds, such as *Numenius madagascariensis*, *Grus grus*, *Charadrius veredus*. Vegetation of *Typha orientalis*, *Scirpus validus*, *Myriophyllum propinquum*, *Sagittaria natans*, etc. are distributed in lakes and rivers and river-beach land based on Taliya River, that provide habitats and breeding grounds for swimming birds, such as *Aythya baeri*, *Anser cygnoides*, *Cygnus Cygnus*, *Cygnus columbianus*, *Aix galericulata* etc. Large area of well-preserved forest ecosystems provides suitable habitats for mammal species, such as *Moschus moschiferus*, *Alces alces*, *Martes zibellina* etc.

At the same time, the Site is the source area of Jiliu River, the main tributary of Ergun River upstream of Heilongjiang River. Therefore, it has a variety of functions of water supply, vegetation and water conservation, flood storage and drought relief.

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

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		3	291	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4	19	
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		0		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		2	3473	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		1	41940	Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Woodland	
Shrub land	
Others	

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Larix gmelinii</i>	Dahurian larch	Widespread species
<i>Populus suaveolens</i>	Mongolian Poplar	Widespread species
<i>Rhododendron lapponicum</i>	Lapland Rosebay	Widespread species
<i>Sagittaria natans</i>	narrow-leaved arrowhead	National Protection Class II
<i>Sphagnum squarrosum</i>	spiky bog-moss	Widespread species

#### 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	<i>Accipiter gularis</i>	Japanese Sparrowhawk				National Protection Class II
CHORDATA/AVES	<i>Accipiter nisus</i>	Eurasian Sparrowhawk				National Protection Class II
CHORDATA/AVES	<i>Aegolius funereus</i>	Boreal Owl				National Protection Class II
CHORDATA/AVES	<i>Aix galericulata</i>	Mandarin Duck				National Protection Class II
CHORDATA/MAMMALIA	<i>Alces alces</i>	Eurasian Elk				National Protection Class II
CHORDATA/AVES	<i>Anser albifrons</i>	Greater White-fronted Goose				National Protection Class II

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Anthropoides virgo</i>	Demoiselle Crane				National Protection Class II
CHORDATA/AVES	<i>Aquila chrysaetos</i>	Golden Eagle				National Protection Class I
CHORDATA/AVES	<i>Asio otus</i>	Northern Long-eared Owl				National Protection Class II
CHORDATA/AVES	<i>Bubo bubo</i>	Eurasian Eagle-Owl				National Protection Class II
CHORDATA/AVES	<i>Buteo buteo</i>	Common Buzzard				National Protection Class II
CHORDATA/AVES	<i>Buteo hemilasius</i>	Upland Buzzard				National Protection Class II
CHORDATA/AVES	<i>Buteo lagopus</i>	Rough-legged Hawk;Rough-legged Buzzard;Roughleg				National Protection Class II
CHORDATA/AVES	<i>Caprimulgus indicus</i>	Gray Nightjar;Grey Nightjar				National Protection Class II
CHORDATA/MAMMALIA	<i>Cervus elaphus</i>	elk				National Protection Class II
CHORDATA/AVES	<i>Charadrius veredus</i>	Oriental Plover				National Protection Class II
CHORDATA/AVES	<i>Circus melanoleucos</i>	Pied Harrier				National Protection Class II
CHORDATA/AVES	<i>Circus spilonotus</i>	Eastern Marsh Harrier				National Protection Class II
CHORDATA/AVES	<i>Cygnus columbianus</i>	Tundra Swan				National Protection Class II
CHORDATA/AVES	<i>Cygnus cygnus</i>	Whooper Swan				National Protection Class II
CHORDATA/AVES	<i>Falco peregrinus</i>	Peregrine Falcon				National Protection Class II
CHORDATA/AVES	<i>Falco subbuteo</i>	Eurasian Hobby				National Protection Class II
CHORDATA/AVES	<i>Falco tinnunculus</i>	Eurasian Kestrel;Common Kestrel				National Protection Class II
CHORDATA/AVES	<i>Falco vespertinus</i>	Red-footed Falcon				National Protection Class II
CHORDATA/AVES	<i>Grus grus</i>	Common Crane				National Protection Class II
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	White-tailed Sea-Eagle				National Protection Class I
CHORDATA/AVES	<i>Lagopus lagopus</i>	Willow Ptarmigan;Willow Grouse				National Protection Class II
CHORDATA/MAMMALIA	<i>Lepus timidus</i>	Mountain Hare				National Protection Class II
CHORDATA/MAMMALIA	<i>Lutra lutra</i>	European Otter				National Protection Class II
CHORDATA/MAMMALIA	<i>Lynx lynx</i>	Eurasian Lynx				National Protection Class II
CHORDATA/MAMMALIA	<i>Martes zibellina</i>	Sable				National Protection Class I
CHORDATA/AVES	<i>Milvus migrans</i>	Black Kite				National Protection Class II
CHORDATA/AVES	<i>Otus sunia</i>	Oriental Scops Owl;Oriental Scops-Owl				National Protection Class II
CHORDATA/AVES	<i>Pandion haliaetus</i>	Western Osprey;Osprey				National Protection Class II
CHORDATA/AVES	<i>Pernis ptilorhynchus</i>	Oriental Honey-buzzard				National Protection Class II
CHORDATA/AVES	<i>Podiceps grisegena</i>	Red-necked Grebe				National Protection Class II
CHORDATA/AVES	<i>Strix nebulosa</i>	Great Gray Owl;Great Grey Owl				National Protection Class II
CHORDATA/AVES	<i>Strix uralensis</i>	Ural Owl				National Protection Class II
CHORDATA/AVES	<i>Sumia ulula</i>	Northern Hawk Owl;Northern Hawk-Owl				National Protection Class II
CHORDATA/AVES	<i>Tetrao parvirostris</i>	Black-billed Capercaillie				National Protection Class I
CHORDATA/MAMMALIA	<i>Ursus arctos</i>	Grizzly Bear;Brown Bear				National Protection Class II

#### 4.4 - Physical components

##### 4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dwc: Subarctic (Severe, dry winter, cool summer)



4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

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.

Heilongjiang Basin

4.4.3 - Soil

- Mneral
- Organic
- No available information

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

Please provide further information on the soil (optional)

The soil in the Site is divided into three soil classes, eight subclasses. The zonal soil is brown coniferous forest soil. The non-zonal soil is mainly meadow soil and bog soil.

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	<input checked="" type="checkbox"/>
Water inputs from surface water	<input checked="" type="checkbox"/>
Water inputs from groundwater	<input type="checkbox"/>

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.

Taliya River is the largest river, with an average width of 20 m and an average depth of 80 cm. It flows across the entire Site and is joined by 11 tributaries including Ankula, Xiken, Jinamijima, Sengai Rivers. Besides, lakes of varying sizes are also found dotted in the valley area of the Site, the largest of which is Niuer Lake with an area of approximately 6 ha and average water depth of 2 m. When snow melts in spring, the water quantity accounts for 20%~30% of the year's runoff. 70% of the precipitation falls from July to September. Spring groundwater recharge accounts for around two thirds of the year's water quantity. The period from November to the next March is the stable freezing season during that river water recharged from surface runoffs has basically stopped, and the rivers would be interrupted or bottom frozen. Temperature rises in summer and climate warming would impair the thickness of the permafrosts, consequently influencing the soil moisture and surface water flow in Hanman Wetlands.

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

4.4.7 - Water salinity

- Fresh (<0.5 g/l)
- Mxohaline (brackish)/Mxosaline (0.5-30 g/l)
- Euhaline/Eusaline (30-40 g/l)
- Hyperhaline/Hypersaline (>40 g/l)
- Unknown

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

Please provide further information on dissolved or suspended nutrients (optional):

The region of Hanma Wetlands is high in altitude. With quite low annual average temperature and permafrost existence, litters decompose slowly causing poor nutrition for the water and soil.

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  ii) significantly different  site itself.

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	Low
Fresh water	Water for irrigated agriculture	Low
Wetland non-food products	Timber	Medium
Wetland non-food products	Fuel wood/fibre	Low
Wetland non-food products	Livestock fodder	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
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 climatic processes	High
Biological control of pests and disease	Support of predators of agricultural pests (e.g., birds feeding on locusts)	Low
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Educational activities and opportunities	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	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	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

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

#### 4.5.2 - Social and cultural values

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

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

Description if applicable

At the boundary of the Site, there lives an unusual, old group, Aoluguya Deer Tribe of Ewenki Nationality. Aoluguya is a branch of China's Ewenki group that migrated three centuries ago from Eluoketun around the Lena River near Lake Baikal to Ergun basin. The current population is 243 and owns 1200 Rangifer tarandus. Rangifer tarandus, which used to be their only traffic means and known as "forest boats" are mostly found in Eurasia, North America and South Siberia. Rangifer tarandus of the Aoluguya tribe is the only population existing in China.

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

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

#### 4.6 - Ecological processes

<no data available>

## 5 - How is the Site managed? (Conservation and management)

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### 5.1.2 - Management authority

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

Administration Bureau of Inner Mongolia Grand Khingan Hanma National Natural Reserve

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

Jingui HU, Director

Postal address:

Bureau of Hanma National Natural Reserve  
Jinhe Town  
Genhe City  
Hulunbuir City  
Inner Mongolia Autonomous Region  
P.R. China

E-mail address:

hujingui18@163.com

### 5.2 - Ecological character threats and responses (Management)

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

##### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Gathering terrestrial plants	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fishing and harvesting aquatic resources	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hunting and collecting terrestrial animals	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

##### 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	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fire and fire suppression	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### 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	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Droughts	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature extremes	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Please describe any other threats (optional):

In recent years, temperature rises in summer and climate warming would impair the thickness of the permafrosts, consequently influencing the soil moisture and surface water flow in Hanman Wetlands.

#### 5.2.2 - Legal conservation status

##### Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Inner Mongolia Hanma National Nature Reserve		whole

##### National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Reserve	Inner Mongolia Grand Khingan Hanma National Nature Reserve	<a href="http://www.hmbhq.com/">http://www.hmbhq.com/</a>	whole

## Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Hanma Nature Reserve	<a href="http://datazone.birdlife.org/site/factsheet/hanma-nature-reserve-iba-china-(mainland)">http://datazone.birdlife.org/site/factsheet/hanma-nature-reserve-iba-china-(mainland)</a>	whole

## 5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

## 5.2.4 - Key conservation measures

## Legal protection

Measures	Status
Legal protection	Implemented

## Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Habitat manipulation/enhancement	Implemented
Land conversion controls	Implemented

## Species

Measures	Status
Threatened/rare species management programmes	Implemented
Reintroductions	Implemented

## Human Activities

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

## Other:

The reserve has regularly carried out armed patrols to crack down on illegal activities such as poaching, stepped up patrols in key time periods to crack down on illegal acquisitions, conducted work on fire protection, patrolling and management of forest resources in protected areas and rescued wildlife. And research and education bases have been established with Inner Mongolia Agricultural University, Beijing Forestry University, Northeast Forestry University, Urban and Environmental Sciences of Peking University and Qufu University. Co-management agreements have been signed on the wetland protection, education, fire prevention, scientific research and cracking down animal and plant poaching with relevant communities and reserves in the surrounding areas to intensify publicity, education and wetland protection.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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

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

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Education Center of Inner Mongolia Grand Khingan Hanma National Nature Reserve

URL of site-related webpage (if relevant):

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
Plant community	Implemented
Plant species	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented
Birds	Implemented

The reserve conducts surveys on wetland resources, regularly monitors permafrost, flora, insects and animals and sets up 1 bird banding station, 1 wildlife rescue station, 1 soil monitoring station, 1 hydrological monitoring station and 1 weather station. They have formulated strict protection measures for animals and plants, provided necessary monitoring equipment for water quality, meteorology, hydrology, animal and plant monitoring, formulated relevant monitoring systems and established monitoring accounts and archives. Monitoring of permafrost and the influence of climate change on wetland ecosystem is implementing

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Chinese Academy of Sciences comprehensive inspection team in Inner Mongolia and Ningxia. Inner Mongolia vegetation[M]. Science Press, 1985.

Dongyun Cheng. 2014. Benefit Calculation of Natural Forest Protection Project in Inner Mongolia Hanma National Nature Reserve. Inner Mongolia Forestry Investigation and Design: 22-23.

Hui Liu, Guangshun Jiang, Hui Li. 2015. A comparative study on four survey methods used in ungulate population size in winter in north China. Acta Ecologica Sinica: 3076-3086.

Liankuan Lv, Ye Li. 2016. Investigation of Ungulate population size in winter in Inner Mongolia Hanma National Nature Reserve. Journal of Anhui Agricultural Sciences: 19-21.

Penghui Zhai, Weihua Zhang, Zhengshan Li. 2015. Biodiversity status and evaluation of Hanma National Nature Reserve. Forest Engineering: 26-29.

Rongkui Li, Weihua Zhang, et al. 2015. A preliminary investigation of rare and endangered species of wild animals in Inner Mongolia Hanma National Nature Reserve. Inner Mongolia Forestry Investigation and Design: 83-86.

Udvardy, M. 1975. Classification of the Biogeographical Provinces of the World. IUCN Occasional Paper No. 18.

Xu dong Yang, Jingui Hu, Ye Li, et al. 2014. Survey of Birds in Hanma National Nature Reserve of Inner Mongolia. Sichuan Journal of Zoology: 931-937.

Yu Chen, Guofa Cui, et al. 2013. Dynamic Change of Forest Resources in Hanma National Nature Reserve of Inner Mongolia. Journal of Northeast Forestry University: 26-29.

#### 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

<no file available>

v. site management plan

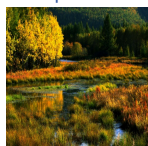
<no file available>

vi. other published literature

<no file available>

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

Please provide at least one photograph of the site:



Wetland landscape ( Wu ZHAO, 23-09-2008 )



Wetland landscape ( Ye LI, 07-07-2010 )



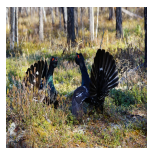
Wetland landscape ( Shi CAI, 10-09-2012 )



Wetland landscape ( Shi CAI, 10-09-2012 )



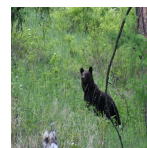
Alces alces ( infrared camera of the reserve, 03-11-2015 )



Tetrao parvirostris ( Haixiang ZHOU, 26-05-2014 )



Martes zibellina ( Xudong YANG, 08-04-2015 )



Ursus arctos ( Kun YANG, 02-06-2011 )



Lynx lynx ( infrared camera of the reserve, 22-08-2012 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2018-01-08