



Ramsar Information Sheet

Published on 6 August 2018

China

Sichuan Changshagongma Wetlands



Designation date	8 January 2018
Site number	2348
Coordinates	33°45'36"N 97°59'29"E
Area	669 800,00 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 in the southeastern margin of the Qinghai-Tibet Plateau, Sichuan Changshagongma Wetlands is typical inland wetlands on the plateau, mainly protecting alpine wetland ecosystems and threatened species such as Kiang (*Equus kiang*), Wild Yak (*Bos mutus*), Black-necked Crane (*Grus nigricollis*), Pallas's Fish-eagle (*Haliaeetus leucoryphus*). A large area of freshwater herbaceous swamps, lakes, rivers and other wetland types are distributed in the area, and a total area of wetlands is 181,711.91 hectares. The amount of water stored in the wetland is about 6.6×10^{10} m³, which is equivalent to 0.2 of the reservoir area of the Three Gorges Reservoir which is an important water source in the source areas of the Yangtze River and Yellow River in China. Under the alpine humid climate, a large area of peat is developed in the wetland, with an average thickness of about 5 m. It is an extremely important carbon sink in the southwestern part of China and even in the biogeographic region. The Site plays an irreplaceable role in regulating the local climate, conserving water, controlling floods, and reducing the greenhouse effect has an irreplaceable role. Staggered swamps, shrubs and meadows in Changshagongma Wetlands provide important habitats for a large number of rare and threatened species such as *Equus kiang* (nationally threatened), *Bos mutus* and *Pantholops hodgsonii*, and are also important stopovers and breeding grounds for many migratory birds such as *Grus nigricollis*. They are of great importance to the biodiversity conservation in China and the world. At present, the Site shows a well-preserved natural state, since wetland protection and wildlife protection have become the tradition of local residents under the influence of Tibetan culture.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Xu WAN
Institution/agency	Administration Bureau of Sichuan Changshagongma National Nature Reserve
Postal address	Bureau of agriculture, forestry, science and technology, Luoxu Town, Shiqu County, Sichuan Province, P.R. China
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	2012
To year	2016

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Sichuan Changshagongma 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 this Ramsar Site is the same as that of Sichuan Changshagongma National Nature Reserve, east to Dari County of Qinghai Province, west to Chengduo County and Tongtianhe sub-area of Qinghai Sanjiangyuan National Nature Reserve, south to Changshagongma Town and Yiniu Town in Shiqu County and north to Zhaling – Eling Lake sub-area of Qinghai Sanjiangyuan National Nature Reserve.

2.2.2 - General location

a) In which large administrative region does the site lie?	In Shiqu County of Ganzi Tibetan Autonomous Region western in Sichuan Province, P.R.China
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b) What is the nearest town or population centre?	The nearest town is Changshagongma 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): 669800

Area, in hectares (ha) as calculated from GIS boundaries 670181.05

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Cold-winter (continental) deserts and semideserts, Tibetan 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 Site is located in the southeastern margin of the Qinghai-Tibet Plateau. The Bayanhar Mountain is the main mountain range and watershed in the area. The Chaqu River basin of the Yellow River in the Site, north of the Bayanhar Mountain with many lakes, rivers and streams, is one of the important water sources in the upper reaches of the Yellow River. And the Yalong River basin of the Yangtze River, south of the Bayanhar Mountain with many streams but less lakes, is one of the important water sources in the upper reaches of the Yangtze River. The total water storage in the wetlands is above 6.6×10^{10} m³. Therefore, the Site plays an extremely important role in water source conservation and supply and ecological balance in the upper reaches of the Yangtze River and the Yellow River.

Other ecosystem services provided

The Site is an alpine wetland with freshwater marshes as the main wetland type and other types such as permanent freshwater lakes and rivers with the average elevation of about 4500 m. It is endemic to high altitude areas in China and a typical representative in alpine wetland ecosystems in the world. Among these wetland types, lowland herbaceous marshes in the Site have reached 172833 hectares; 471 alpine lakes are mainly distributed in the late Quaternary glacial relics and are independent of each other; the rivers are plume-shaped, of which there are nine tributaries with a catchment area of more than 500 km², ten tributaries with a catchment area of 100-500 km². Water resources of the Site are abundant. In particular, 300,000 to 400,000 hectares of peatland ecosystems (forests and marshes) are distributed along the valleys and slopes, and the average peat layer thickness is about 5 m. Large-scale alpine meadows, alpine lakes, herbivorous marsh wetland ecosystems and alpine scrub ecosystems are important carbon sink function areas in the biogeographical region and even in Asia, playing an extremely important role in regulating the climate, conserving soil and water and stabilizing water source of the Yangtze and Yellow Rivers.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

Located in the southeastern margin of the Qinghai-Tibet Plateau, the Ramsar Site is a rare and typical alpine herbaceous marsh wetland at high altitude in the world. Wetland vegetation types are shrubs, meadows, rocky beaches and swamps, of which vascular plants contain a total of 47 families, 165 genera and 441 species. Due to its unique ecosystem and geographical location, there are 208 species of vertebrates living here, including 44 species of mammals, 155 species of birds, 3 species of amphibians and 6 species of fishes. Among 44 species of mammals distributed in this area, 17 species belong to the national key protected animals, accounting for 38.64% of the existing mammals, such as Equus kiang, Pantholops hodgsonii, Pantholops hodgsonii, etc.; 6 species are endemic to China, such as Moschus chrysogaster, Przewalskium albirostris and so on. The Site is one of the hot spots for biodiversity in biogeographical areas.

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

- Criterion 6 : >1% waterbird population

- Criterion 7 : Significant and representative fish





























Justification

As the reserve is located in the high altitude, with severe coldness and intense solar radiation, fishes in the Site mainly belong to Triplophysa and specialized species of Schizothoracinae and are all endemic species of the Qinghai - Tibet Plateau. There are 1 orders, 2 families and 4 genera 6 species in total, including Triplophysa brewiuda, Triplophysa stoliczkae, Triplophysa stenura, Gymnodiptychus pachycheilus, Diptychus kaznakovi and Chuanchia labiosa, among which Gymnodiptychus pachycheilus, Diptychus kaznakovi are distributed in the main rivers of the reserve, with a relatively large resources.

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				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								
Birds																		
CHORDATA / AVES	 <i>Aquila clanga</i>	Greater Spotted Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	National Protection Class II	
CHORDATA / AVES	 <i>Aquila nipalensis</i>	Steppe Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class II	
CHORDATA / AVES	 <i>Falco cherrug</i>	Saker Falcon	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	National Protection Class II	Crit 4: Breeding ground
CHORDATA / AVES	 <i>Grus nigricollis</i>	Black-necked Crane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	150	2012-2016	1.5	VU 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground. Crit 6: 1 % threshold for C, S Asia is 100 as of 2012 and the population size is the average over the three years counted.
CHORDATA / AVES	 <i>Haliaeetus leucoryphus</i>	Pallas's Fish 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"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground
CHORDATA / AVES	 <i>Lophophorus lhuysii</i>	Chinese Monal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground
CHORDATA / AVES	 <i>Mergus squamatus</i>	Scaly-sided Merganser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	200	2012-2016	4	EN 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 6: 1 % threshold for E, SE Asia is 50 as of 2012 and the population size is the average over the three years counted.
CHORDATA / AVES	 <i>Tadorna ferruginea</i>	Ruddy Shelduck	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3000	2012-2016	4.2	LC 	<input type="checkbox"/>	<input type="checkbox"/>		Crit 6: 1 % threshold for E Asia is 710 as of 2012 and the population size is the average over the three years counted.
Others																		
CHORDATA / MAMMALIA	 <i>Aonyx cinereus</i>	Asian Small-clawed Otter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class II	Crit 4: Breeding ground
CHORDATA / MAMMALIA	 <i>Felis bieti</i>	Chinese Mountain Cat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class II	Crit 4: Breeding ground
CHORDATA / MAMMALIA	 <i>Moschus chrysogaster</i>	alpine 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"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground
CHORDATA / MAMMALIA	 <i>Pantholops hodgsonii</i>	chiru; Tibetan antelope	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground
CHORDATA / MAMMALIA	 <i>Przewalskium albirostre</i>	White-lipped 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"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground
CHORDATA / MAMMALIA	 <i>Uncia uncia</i>	Snow leopard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40	2012-2016		EN 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	National Protection Class I	Crit 4: Breeding ground

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

The Site consists of four wetland types with permanent freshwater marshes as the main type of wetland and other types such as permanent freshwater lakes, permanent rivers and shrub-dominated wetlands. The main vegetation types are shrubs (alpine shrubs), meadows (alpine meadows and swampy meadows), rocky beach vegetation and marsh vegetation (lowland herbaceous swamps). In the broad herbaceous wetland, the main plants are *Carex* spp. (with a coverage of 30-85%), *Kobresia* spp., *Poa* spp., *Juncus* spp., constituting a relatively complete freshwater swamp ecosystem, which provides good foraging and habitat environment for rare and endangered bird species such as *Ciconia nigra*, *Grus nigricollis*, *Haliaeetus leucoryphus* and many other water birds and also important habitats for rare wetland animals such as *Aonyx cinerea* and *Catopuma temminckii*. In the meadows, the dominated vegetation types are *Kobresia* meadows and *Carex* swamp meadows, which provides foraging and inhabiting grounds for raptors such as *Accipiter gentilis*, *Buteo hemilasius*, *Aquila clanga* and mammals such as *Marmota himalayana*, *Ochotona curzoniae*. In the rocky beaches, plants such as *Saussurea*, *Rhodiola* and *Meconopsis* are commonly distributed, which are the major distribution areas of *Pseudois nayaur* population. In the alpine shrubs, the dominant species are *Hippophe rhamnoides*, *Salix oritrepha* and *Caragana tangutica* and provide important habitats for *Tetraogallus tibetanus*, *Ithaginis cruentus*, *Moschus chrysogaster*, *Catopuma temminckii*, *Lynx lynx* and other rare animals. Meanwhile, the Site is an important water source place in the upper reaches of the Yangtze River and the Yellow River and plays an extremely important role in regulating the local climate, maintaining soil and water resources, conserving water sources, stabilizing water sources of the Yangtze River and Yellow River.

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	2598.13	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2	6280.34	Unique
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		1	172291.8	Unique
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		0		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		4	541.64	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Meconopsis punicea</i>		National Protection Class II

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 gentilis</i>	Northern Goshawk				National Protection Class II
CHORDATA/AVES	<i>Aquila chrysaetos</i>	Golden Eagle				National Protection Class II
CHORDATA/AVES	<i>Athene noctua</i>	Little 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/MAMMALIA	<i>Canis lupus</i>	Gray Wolf				National Protection Class II
CHORDATA/MAMMALIA	<i>Catopuma temminckii</i>	Asian Golden Cat				National Protection Class II
CHORDATA/MAMMALIA	<i>Cervus elaphus</i>	Red Deer				National Protection Class II
CHORDATA/AVES	<i>Ciconia nigra</i>	Black Stork				National Protection Class II
CHORDATA/AVES	<i>Circus cyaneus</i>	Northern Harrier				National Protection Class II
CHORDATA/AVES	<i>Circus spilonotus</i>	Eastern Marsh Harrier				National Protection Class I
CHORDATA/AVES	<i>Cygnus cygnus</i>	Whooper Swan				National Protection Class II
CHORDATA/AVES	<i>Cygnus olor</i>	Mute Swan				National Protection Class II
CHORDATA/MAMMALIA	<i>Equus kiang</i>	Kiang;Tibetan Wild Ass	1500	2012-2016		National Protection Class II
CHORDATA/AVES	<i>Falco tinnunculus</i>	Eurasian Kestrel;Common Kestrel				National Protection Class II
CHORDATA/AVES	<i>Grus grus</i>	Common Crane				National Protection Class II
CHORDATA/AVES	<i>Gypaetus barbatus</i>	Lammergeyer				National Protection Class II
CHORDATA/AVES	<i>Gyps himalayensis</i>	Himalayan Vulture				National Protection Class II
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	White-tailed Sea Eagle				National Protection Class II
CHORDATA/AVES	<i>Ithaginis cruentus</i>	Blood Pheasant				National Protection Class II
CHORDATA/MAMMALIA	<i>Lynx lynx</i>	Eurasian Lynx				National Protection Class II
CHORDATA/MAMMALIA	<i>Martes foina</i>	Beech Marten				National Protection Class II
CHORDATA/AVES	<i>Milvus migrans</i>	Black Kite				National Protection Class II
CHORDATA/MAMMALIA	<i>Ovis ammon</i>	argali				National Protection Class II
CHORDATA/AVES	<i>Pandion haliaetus</i>	Western Osprey;Osprey				National Protection Class I
CHORDATA/MAMMALIA	<i>Procapra picticaudata</i>	Tibetan gazelle	2500	2012-2016		National Protection Class II
CHORDATA/MAMMALIA	<i>Pseudois nayaur</i>	bharal				National Protection Class II
CHORDATA/AVES	<i>Tetraogallus tibetanus</i>	Tibetan Snowcock				National Protection Class II
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)
E: Polar climate with extremely cold winters and summers	ET: Tundra (Polar tundra, no true summer)

Climate warming, especially in winter and spring, will make permafrost ablation, peat sinking, marsh wetlands water level down.

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.

Jinsha River and Yalong River Basin in Yangtze River, and Yellow River 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 is dominated by alpine meadow soil and sub-alpine meadow soil, followed by dark brown loam.

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 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.

The northern part of Bayanhar Mountain is the Yellow River and the southern part is the Yalong River. The larger rivers are first tributaries (Mamucao River and Yangyong River) of Yalong River and branches of the first tributary (Zhaqu River) of Yellow River. Among them, the annual average runoff of Mamucao River is 21.3 cubic meters per second; the mean annual runoff of Yangyong River is 10.4 cubic meters per second; the branch river (Zhayong River) of Zhaqu River is surveyed with an annual average runoff of 10.4 cubic meters per second.

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- Significant accretion or deposition of sediments occurs on the site
- Significant transportation of sediments occurs on or through the site
- Sediment regime is highly variable, either seasonally or inter-annually
- Sediment regime unknown

4.4.6 - Water pH

- Acid (pH<5.5)
- Circumneutral (pH: 5.5-7.4)
- Alkaline (pH>7.4)
- Unknown

Please provide further information on pH (optional):

The pH value of the surface water is 7.73-8.24. And water quality reaches the first grade of state surface water environmental quality standard.

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

(ECD) Dissolved gases in water

The mean of dissolved oxygen in water body is 6.48mg/L, and the dissolved oxygen is related to water temperature and water layer.

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the 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	Medium
Fresh water	Water for irrigated agriculture	Medium
Wetland non-food products	Livestock fodder	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	High
Erosion protection	Soil, sediment and nutrient retention	High
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium
Climate regulation	Local climate regulation/buffering of change	High
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climatic processes	High
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	Medium
Spiritual and inspirational	Spiritual and religious values	Medium
Scientific and educational	Educational activities and opportunities	Medium

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	Medium
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High
Nutrient cycling	Carbon storage/sequestration	High

Within the site: 2360

Outside the site: 83210

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
- 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

Description if applicable

Tibetan people believe in Buddhism, respect for nature, and effectively protect the mountains and water. The creed that they do not kill make a significant contribution to the wildlife protection.

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 Sichuan Changshagongma National Nature Reserve

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

Guangjun DENG, Director

Postal address:

Luoxu Town
Shiqu County
Ganzi Tibetan Autonomous Region
Sichuan Province
P.R. China

E-mail address:

691441073@qq.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	In the surrounding area
Livestock farming and ranching	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Transportation and service corridors

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

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 checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Vegetation clearance/ land conversion	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Problematic native species	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Climate change and severe weather

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

Please describe any other threats (optional):

Climate warming, especially in winter and spring, will make permafrost ablation, peat sinking, marsh wetlands water level down. Local grazing activities have, to some extent, destroyed grassland vegetation and increased the risk of desertification in grasslands. In addition, the collection process of fungi and medicinal plants to some extent destroyed the native vegetation, easily lead to soil degradation and desertification.

5.2.2 - Legal conservation status

National legal designations

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

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Changshagongma Nature Reserve	http://datazone.birdlife.org/site/factsheet/changshagongma-nature-reserve-iba-china-(mainland)	partly

5.2.3 - IUCN protected areas categories (2008)

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

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Proposed
Improvement of water quality	Implemented
Habitat manipulation/enhancement	Proposed
Hydrology management/restoration	Partially implemented
Re-vegetation	Implemented
Soil management	Partially implemented
Land conversion controls	Partially implemented

Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

Human Activities

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

Other:

In order to protect the ecological security of the Yangtze River and Yellow River, the county government attached great importance to wetland protection and management, making explicit provisions to prohibit hunting, mineral development and reclamation of animal husbandry. Such measures as returning grazing land to grassland, grassland ecological compensation mechanism and desertification control have been implemented to control land degradation. Part of the degraded peat was restored through key ecotransplant payments. Publicity and education have been carried out to raise awareness of environmental protection among policymakers and pastoralists. Ecological rangers have been organized to carry out wetland patrol work from 2016 to 2017, 165 person-times in total. At the same time, the reserve and the surrounding villages have formed a co-management committee. The members are mainly local herdsmen, and jointly protect wetland and wildlife resources in the reserve and surrounding areas. They become an important protection force for the reserve.

5.2.5 - Management planning

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

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

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

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

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

The reserve has conducted a survey of freshwater herbivorous wetland ecosystems and a special survey of species *Pantholops hodgsonii* and *Equus kiang*, which are endemic to the Qinghai-Tibet Plateau.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Investigation report on wetland resources in Ganzi state. 2012.
Master Plan of Changshagongma Nature Reserve. 2007.
Sichuan volume of Wetland resources in China. 2015. China Forestry Publishing House.
Scientific Investigation Report of Changshagongma Nature Reserve. 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

<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

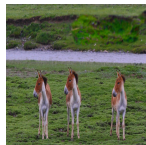
Please provide at least one photograph of the site:



Wetland landscape of permanent freshwater marshes (*the Reserve*, 08-2011)



Wetland landscape of permanent freshwater marshes (*the Reserve*, 08-2017)



Equus kiang (*the Reserve*, 03-08-2017)



Grus nigricollis (*the Reserve*, 10-2017)



Uncia uncia (*the Reserve*, 29-09-2015)



Lake wetland landscape (*the Reserve*, 04-08-2017)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2018-01-08