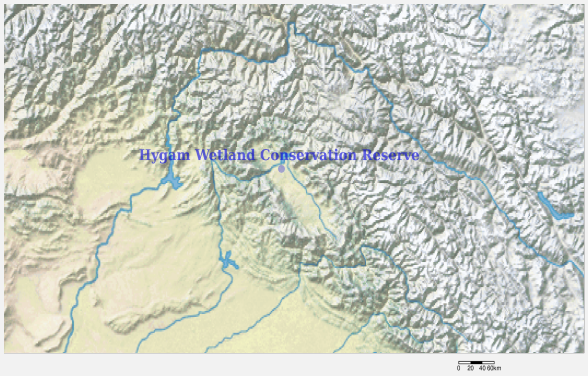
Ramsar Information Sheet

Published on 31 October 2022

India

Hygam Wetland Conservation Reserve



Designation date	8 June 2022
Site number	2496
Coordinates	34°14'24"N 74°31'36"E
Area	801,82 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

Hygam Wetland falls within the River Jhelum basin and plays a significant role as a flood absorption basin, biodiversity conservation site, eco-tourism site, and livelihood security for the local communities. The wetland is located adjacent to the Southern tip of Wular Lake which is a Ramsar Site and forms a part of interconnected ecosystem complex. The wetland is located in the Baramulla district. It lies in the flood basin of the Jhelum River and the Sub-basin of Ningli and Ferozpora Nallah. Of the total water received by the Wetland, 90% is contributed from surface inlets and the remaining 10% through precipitation. The wetland is roughly a cone in outline and spreads over 801.82 ha.. The average elevation of the Wetland is 1580m above MSL. It serves as an abode to many residents and migratory bird species. It is also recognized as an Important Bird Area (IBA). Continuous siltation has decreased the depth of the wetland accompanied by a decrease in water levels. The willow plantations at places have also added to the siltation and accumulation of nutrients in the wetland and modified the wetland characteristics. Consequent to the high rate of siltation, Hygam Wetland has lost its wetland characteristics to a large extent and in many places changed its profile into a landmass. This has resulted in further loss of habitat conditions to offer a suitable site for visiting migratory birds (Winter/ Summer migrants) and for resident birds as well. Both the inlet channels have lost the gradient and velocity due to heavy silt load and therefore, act as the delta for all the silt load, pollutants, and nutrients into the wetland. The silted marshes/landmasses in the wetland are often brought under paddy cultivation by the fringe villagers.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	Department of Wildlife Protection J&K Government
Postal address	Office of the Chief Wildlife Warden, Wildlife Protection Department, Police Golf course Near Hotel Grand Palace, Boulevard Road Srinagar 190001

National Ramsar Administrative Authority

Institution/agency	Ministry of Environment, Forest and Climate Change, Government of India
Postal address	Office of the Secretary Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan Jorbagh Road New Delhi - 110 003 - INDIA

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

From year	2016
To year	2021

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Hygam Wetland Conservation Reserve
Unofficial name (optional)	Hygam rakh

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps	0

Boundaries description

The Hygam wetland boundary on the north is restricted by the presence of the Sopore- Sonawari general road, and is about a few kilometers from the mighty Wular lake. To the south, it coincides with the boundary of the Hygam Wetland Conservation Reserve, as notified by the State Wetland Authority, Jammu & Kashmir State Government and is limited by the human inhabitations in the villages of Goshbugh and Sukhul. To the east of the wetland is the densely populated Aakhanpora and to the west it is bounded by village Hanjypora. So, the boundaries have mainly been determined by the presence of major roads and human habitation on all sides.

2.2.2 - General location

a) In which large administrative region does the site lie?	The wetland is 40 km from Srinagar, the UT summer capital and located in district Baramulla (34015'N, 74031'E) of Jammu & Kashmir on the flood plains of river Jhelum at an altitudinal height of 1580 m asl.
b) What is the nearest town or population centre?	The nearest and the main town and population centre is Spore and Wetland is approachable by a motorable road 5 km away. A total of 22 No of villages having population size >90,000 are located in the fringes within 1 -2 Km from the boundary of the Wetland.

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):	801.82
Area, in hectares (ha) as calculated from GIS boundaries	801.82

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	2A North Western Himalaya

Other biogeographic regionalisation scheme

Biogeographic classification of India is the division of India according to biogeographic characteristics. Biogeography is the study of the distribution of species (biology), organisms, and ecosystems in geographic space and through geological time. Most of India falls in the "Indian Subcontinent" bioregion of the Indomalayan realm, which covers most of India, Pakistan, Bangladesh, Nepal, Bhutan, and Sri Lanka. The Hindu Kush, Karakoram, Himalaya, and Patkai ranges bound the bioregion on the northwest, north, and northeast; these ranges were formed by the collision of the northward-drifting Indian subcontinent with Asia beginning 45 million years ago. The Hindu Kush, Karakoram, and Himalaya are a major biogeographic boundary between the subtropical and tropical flora and fauna of the Indian subcontinent and the temperate-climate Palearctic realm. Kashmir Valley however, as per Fresh Water Ecoregions of the World (FEOW) falls in Indus Himalayan Foothills (Ecoregion ID 705) a River Jehlum Basin Wetland tributary of Indus.

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	Hygam Wetland is a major natural floodplain system and plays a major role in the natural control, amelioration, or prevention of flooding, It is also important for seasonal water retention for wetlands or other areas of conservation importance downstream. The wetland is important for the recharge of aquifers.
Other ecosystem services provided	Hygam Wetland provides a plethora of ecosystem services, these include fish and fiber, water supply, water purification, climate regulation, flood regulation, and recreational opportunities. The livelihoods of people living in, and adjoining the fringes of wetlands depend partially or entirely on wetland ecosystem services.
Other reasons	Hygam is highly productive, supports exceptionally large biological diversity, and provides a wide range of ecosystem services, such as food and fiber; waste assimilation; water purification; flood mitigation; erosion control; groundwater recharge; microclimate regulation; enhancement of aesthetics of the landscape; support many significant recreational, social and cultural activities, besides being a part of our cultural heritage. It is a vital part of the hydrological cycle in the valley. Two perennial streams of Balatal Nalla and Nigli Nalla along with flood water feed the wetland. The wetland is drained into Wallur Lake (Ramsar Site No 461) through Nalla Sukhnag. Connecting Two Ramsar Sites will improve interconnectedness and conservation.

☑ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information	The site supports IUCN conservational significant species like Cyprinus carpio, and Aythya ferina.

☑ Criterion 3 : Biological diversity

Justification	The Hygam wetland Reserve is a “hotspot” of biological diversity and are evidently species-rich. Besides, Hygam is a center of endemism and contains significant numbers of endemic species. It also exhibits a range of biological diversity (including habitat types). It is a part of the Central Asian Flyway. The following species are representative and significant for maintaining the biodiversity of the region: Bufotes viridis, Canis aureus, Euphlyctis cyanophlyctis, Lutra lutra, Crossocheilus atrilimes, Cyprinus carpio, Gambusia affinis, Pethia conchonius, Anas acuta, Anas clypeata, Anas crecca, Anas penelope, Anas platyrhynchos, Anas querquedula, Anas strepera, Anser anser, Aythya ferina, Aythya nyroca, Fulica atra, Gallinula chloropus, and Porphyrio porphyrio.

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	47774
Start year	2015
End year	2021
Source of data:	Asian Water Bird Census

Optional text box to provide further information: Total number of individuals reported as per the Asian Waterbird Census in the wetland is 286,645. Therefore, the annual average is about 47,774. The following species contribute to this number: Alcedo atthis, Anas acuta, Anas clypeata, Anas crecca, Anas penelope, Anas platyrhynchos, Anas querquedula, Anas strepera, Anser anser, Ardea cinerea, Ardeola grayii, Aythya ferina, Aythya nyroca, Fulica atra, Gallinula chloropus, Halcyon smyrnensis, Porphyrio porphyrio, Rhinella achavali, and Tachybaptus ruficollis.

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further information: The wetland houses more than 1% threshold population of the following waterbirds: Anas crecca, and Anas platyrhynchos.

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	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Others																	
CHORDATA / AMPHIBIA	*Bufotes viridis*	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Significant and representative of the biodiversity of the region.
CHORDATA / MAMMALIA	*Canis aureus*	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Significant and representative of the biodiversity of the region.
CHORDATA / AMPHIBIA	*Euphlyctis cyanophlyctis*	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Significant and representative of the biodiversity of the region.
CHORDATA / MAMMALIA	*Lutra lutra*	☐	☐	☐	☐	☑	☐	☐	☐				NT	☑	☐		Significant and representative of the biodiversity of the region.
Fish, Mollusc and Crustacea																	
CHORDATA / ACTINOPTERYGII	*Crossocheilus atrilimes*	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Significant and representative of the biodiversity of the region.
CHORDATA / ACTINOPTERYGII	*Cyprinus carpio*	☑	☐	☐	☐	☑	☐	☐	☐				VU	☐	☐		Significant and representative of the biodiversity of the region. Vulnerable species.
CHORDATA / ACTINOPTERYGII	*Gambusia affinis*	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Significant and representative of the biodiversity of the region.
CHORDATA / ACTINOPTERYGII	*Pethia conchonius*	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Significant and representative of the biodiversity of the region.
Birds																	
CHORDATA / AVES	*Alcedo atthis*	☐	☐	☐	☐	☐	☑	☐	☐	2	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anas acuta*	☐	☐	☐	☐	☑	☑	☐	☐	6042	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anas clypeata*	☐	☐	☐	☐	☐	☑	☐	☐	4250	2015-2021			☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA / AVES	*Anas crecca*	☐	☐	☑	☐	☑	☑	☐	☐	8292	2015-2021	2.07	LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anas penelope*	☐	☐	☐	☐	☐	☑	☐	☐	7083	2015-2021			☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anas platyrhynchos*	☐	☐	☑	☐	☑	☑	☐	☐	6167	2015-2021	8.22	LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anas querquedula*	☐	☐	☐	☐	☑	☑	☐	☐	2500	2015-2021			☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anas strepera*	☐	☐	☐	☐	☑	☑	☐	☐	9167	2015-2021			☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Anser anser*	☐	☐	☐	☐	☑	☑	☐	☐	458	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Ardea cinerea*	☐	☐	☐	☐	☐	☑	☐	☐	25	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Ardeola grayii*	☐	☐	☐	☐	☐	☑	☐	☐	25	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Aythya ferina*	☑	☐	☐	☐	☑	☑	☐	☐	1125	2015-2021		VU	☐	☐		The wetland being a part of the Central Asian Flyway allows this vulnerable bird to use it for nesting and roosting.
CHORDATA / AVES	*Aythya nyroca*	☐	☐	☐	☐	☑	☑	☐	☐	542	2015-2021		NT	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Fulica atra*	☐	☐	☐	☐	☑	☑	☐	☐	1108	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Gallinula chloropus*	☐	☐	☐	☐	☑	☑	☐	☐	408	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Halcyon smyrnensis*	☐	☐	☐	☐	☐	☑	☐	☐	2	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AVES	*Porphyrio porphyrio*	☐	☐	☐	☐	☑	☑	☐	☐	529	2015-2021		LC	☐	☐		The wetland being a part of the Central Asian Flyway allows this bird to use it for nesting and roosting.
CHORDATA / AMPHIBIA	*Rhinella achavali*	☐	☐	☐	☐	☑	☐	☐	☐	25	2015-2021		LC	☐	☐		
CHORDATA / AVES	*Tachybaptus ruficollis*	☐	☐	☐	☐	☐	☑	☐	☐	25	2015-2021		LC	☐	☐		

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

Hygam Wetland is notified as a Wildlife Conservation reserve and is under the direct administrative control of Wildlife Protection department J&K. The wetland offers conducive habitat conditions for more than 7 lakh waterfowl during the winter season. The marshland supports various ecological and economic services, which include fisheries, food products, freshwater, and purification of water, and contributes to regulating the global climate. The wetland supports a broad range of hydrological functions, for example, regulation of floods, recharge of groundwater, control stream flow, and carbon sequestration.

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 > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils	Hygam	1	801.82	Representative

(ECD) Habitat connectivity	Hygam Wetland is located in close proximity to already designated Ramsar Site No 461 i.e Wular Lake and has a great potential in terms of habitat connectivity.

4.3 - Biological components

4.3.1 - Plant species

<no data available>

4.3.2 - Animal species

<no data available>

4.4 - Physical components

4.4.1 - Climate

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

Climate change poses a great threat to this river basin wetland. The very sustenance of the wetland depends on the climatic pattern and any change to this phenomenon will bring death to the wetland Ecosystem.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 1579

a) Maximum elevation above sea level (in metres): 1580

- 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.

Indus River Basin, Subbasin River Jehlum

4.4.3 - Soil

Mineral ☐

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 alluvial soils are deposited by the action of the river Jehlum and are found in the river channels, floodplains, and lakes of Kashmir including Hygam Wetland. The alluvial soil includes all consolidated fragmented material from the coarsest gravels and sands down to the finest clay and silt-sized particles. In other words, sand, silt, and mud were brought down by river Jehlum in floods and deposited on the temporarily submerged lands in the wetland. The Soil is most productive.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from surface water	☑	No change
Water inputs from precipitation	☐	No change
Water inputs from groundwater	☐	No change

Water destination

Presence?	
To downstream catchment	No change
Feeds groundwater	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

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

The wetland is fed by perennial streams of the Balkul and Ningli flood channels and numerous smaller streams. The water table fluctuates seasonally and falls in late summer and reaches its lowest in autumn, then begins to rise again in early winter.

(ECD) Connectivity of surface waters and of groundwater: Integral part of river system

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 ☐

Please provide further information on sediment (optional):

The rate of siltation has been estimated as 3.33 acre per ft. per year. Siltation has already claimed about 50% of wetland.The heavy siltation load from the Ningli and Bal Koul Nallahs from the Ferozpora catchment has rendered most parts of the wetlands into land mass and marshes.

(ECD) Water turbidity and colour: Higher turbidity content colour changes bluish to hazel 15.81±1.97 N.T.U

(ECD) Light - reaching wetland: 40-50%

(ECD) Water temperature: -2.2 to 20°C

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) ☑
Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☐
Euhaline/Eusaline (30-40 g/l) ☐
Hyperhaline/Hypersaline (>40 g/l) ☐
Unknown ☐

Please provide further information on salinity (optional):

Fresh water of River Jehlum is the main source

(ECD) Dissolved gases in water

COD 293.33±4.08 BOD 194.51±5.79 MG/L

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 agricultural fields near Hygam wetland use high doses of both organic and inorganic fertilizers for maximizing the yield. Farmers who have apple orchards also use lots of agrochemicals including synthetic fertilizers much above the permissible limits per acre. Hygam wetland acts like a sink to these excessive doses of nutrient ions due to which cultural eutrophication of the wetland is taking place leading to growth and multiplication of macrophytes as well as microphytes.

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

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has greater urbanisation or development ☑
Surrounding area has higher human population density ☑
Surrounding area has more intensive agricultural use ☑
Surrounding area has significantly different land cover or habitat types ☐

Please describe other ways in which the surrounding area is different:

The agricultural fields near Hygam wetland use high doses of both organic and inorganic fertilizers
for maximizing the yield. Farmers who have apple orchards also use lots of agrochemicals including synthetic fertilizers much above the permissible limits per acre. Hygam wetland acts like a sink to these excessive doses of nutrient ions due to which cultural eutrophication of the wetland is taking place leading to growth and multiplication of macrophytes as well as microphytes.

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)	Medium
Fresh water	Drinking water for humans and/or livestock	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or 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

Optional text box to provide further information

Hygam wetland provides an over-wintering resort to about 6 lakh waterbirds from their breeding grounds in the Palearctic region extending from north Europe to Central Asia. Hygam decreases flooding, remove pollutants from water, recharge groundwater, protect embankments, provide habitat for wildlife, and perform other various important functions.

Other ecosystem service(s) not included above:

Hygam wetland is a critical source of livelihood and job opportunities for a large number of populations in the form of fishing, farming, tourism, etc. also providing safe refuge to native vegetation and wild animals. In the Hygam ecosystem, nutrients are recycled between the producers, consumers, and decomposers. Oxygen and carbon dioxide are recycled between the plants and animals and water is cycled through the water cycle.

Within the site: 10000

Outside the site: 100000

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

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 ☐

<no data available>

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☑

Other

Category	Within the Ramsar Site	In the surrounding area
Commoners/customary rights	☐	☑

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

a) The site is a notified wildlife protected area declared as Wildlife Conservation Reserve and is ownership vests with the Government of UT of J&K (Department of Wildlife Protection.
b) Surrounding Zone of influence largely comprise of village settlements, agricultural fields and orchards besides Wular Lake which a declared Ramsar Site No 461.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Department of Wildlife Protection, Government of UT of Jammu & Kashmir

Provide the name and/or title of the person or people with responsibility for the wetland: Rashid Y Naqash, Regional Wildlife Warden Kashmir Region, Department of Wildlife Protection

Postal address: Department of Wildlife Protection, Near Hotel Grand Palace, Police Golf Course, Boulevard Road, Srinagar, Kashmir UT of Jammu and Kashmir 190001 INDIA

E-mail address: rwlwkashmir@gmail.com

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified development	High impact		☐	☑

Water regulation

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Wood and pulp plantations	Medium impact		☑	☐
Annual and perennial non-timber crops	Medium impact		☑	☐

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	Medium impact		☑	☐

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified/others	Medium impact		☑	☐

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	High impact		☑	☑
Garbage and solid waste	High impact		☑	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	High impact		☑	☐

Please describe any other threats (optional):

Due to undesirable and excessive silting/ sedimentation the very existence of the Wetland is under severe threat. The maximum sediment accumulation share is from Ningli Flood Diversion Channel which carries high suspended silt load directly into the wetland during high flows. Continuous siltation has decreased the depth of the wetland accompanied by decrease in water levels. The willow plantations at places have also added to the siltation and accumulation of nutrients in the wetland and has brought change in wetland characteristics. Besides illegal occupation of land for paddy cultivation and use of fertilizers, Hygam Wetland has lost its wetland has changed its physical profile into a land mass along the fringes, thereby shrunken and squeezed the wetland from all sides. This has resulted in loss of habitat conditions to offer a suitable site for visiting migratory birds (Winter/ Summer migrants) and for resident birds as well.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Wildlife Conservation Reserve	Hygam Wetland Reserve		partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Hygam reserve	http://datazone.birdlife.org/site/factsheet/haigam-rakh-(marshes)-iba-india	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
Habitat manipulation/enhancement	Partially implemented
Hydrology management/restoration	Partially implemented

Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Partially implemented
Regulation/management of wastes	Partially implemented
Harvest controls/poaching enforcement	Partially implemented

Other:

The major threats to Hygam wetland includes increased siltation, eutrophication due to run-off from catchments, agricultural conversion, receding open water areas as a result of expanding reed beds, construction of canals, weirs, illegal encroachments by the encroachers.

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 need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Birds	Implemented

Research, Survey and Census, water quality monitoring, fitting PTT and ringing of waterfowl

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Foziah, Hamid, 2009, “A Study on Waterfowl Population and Human Use of Hokersar and Hygam Wetlands of Kashmir Valley for Conservation Planning”, thesis PhD, Saurashtra University.
Annual Plans of Wildlife Protection Department
Draft Management Action Plan
Diversity and Abundance of Avifauna of Haigam Wetland and Its Adjoining Areas, J&K, India Ishrat Jan1 *, G. Mustafa Shah2 , Ulfat Jan3 Research Scholar, Department of Zoology, University of Kashmir J&K, India1 Professor, Department of Zoology, University of Kashmir J&K, India2 Professor, Department of Zoology, University of Kashmir J&K, India3

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
<2 file(s) uploaded>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<1 file(s) uploaded>

vi. other published literature
<8 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Photograph of the flood basin. (*Rashid Naqash, 23-04-2014*)

Migratory Waterfowl congregation at Hygam wetland. (*Rashid Naqash, 09-02-2020*)

Photograph of the flood basin. (*Rashid Naqash, 04-02-2022*)

Photograph of the wetland channel. (*Rashid Naqash, 04-02-2022*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2022-06-08