



Ramsar Information Sheet

Published on 15 October 2026

India

Sukhna Wetland



Designation date	16 March 2026
Site number	2602
Coordinates	30°44'32"N 76°49'17"E
Area	199,51 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

Sukhna Wetland is a human-made, rainfed freshwater wetland located in the foothills of the Shivalik Range within the Union Territory of Chandigarh. The wetland extends between 30°44'31.8" N, 76°48'48.6" E and 30°48'19.8" N, 76°52'43.5" E, with an elevation ranging from approximately 304 to 365 m above mean sea level. The wetland came into existence in 1958 by building a 12.8-meter-high rock-fill earthen dam across the seasonal Sukhna rivulet. The hydrology of the system is primarily sustained by rainfall-driven runoff, with two major ephemeral streams, Kansal and Saketri, discharging into the wetland through the Sukhna rivulet. The wetland is surrounded by Kaimbwala village on the northern side, forest area and agricultural fields on the east and boat club on the west. The wetland is one of the prime tourist places of Chandigarh, used for recreational purposes like sightseeing, boating, water sports, strolls and exercises along with supporting a diverse assemblage of biodiversity. Key species reported from this wetland and listed in the IUCN Red List of Threatened Species, CITIES and Indian Wildlife Protection Act 1972, includes <i>Neophron percnopterus</i>, <i>Haliaeetus leucoryphus</i>, <i>Rynchops albicollis</i>, <i>Aquila nipalensis</i>, <i>Geoclemys hamiltonii</i>, <i>Pteropus vampyrus</i>, <i>Rusa unicolor</i>, <i>Sterna aurantia</i>, <i>Aythya ferina</i>, <i>Phalacrocorax carbo</i>, <i>Ardea cinerea</i>, <i>Pangshura smithii</i>, <i>Naja naja</i>, <i>Python molurus</i> and <i>Varanus bengalensis</i>. Major challenges for scientific management of Sukhna wetland are inflow of silt from its catchment area and invasive species proliferation. For scientific management of Sukhna Wetland notified under Wetland (Conservation & Management) Rules 2017 an Integrated Management Plan has been prepared covering all aspects. To check soil erosion from the catchment several soil and moisture conservation works including vegetative and engineering measures are taken up as a result of which the silt load has significantly reduced. Proliferation of weed is being addressed through periodic removal of weeds from wetland.
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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 Forests and Wildlife, UT Chandigarh
Postal address	2nd floor, Paryavaran Bhawan, Sector – 19 B, Madhya Marg, Chandigarh (UT) - 160019

National Ramsar Administrative Authority

Institution/agency	Ministry of Environment, Forests and Climate Change, Government of India
Postal address	Ministry of Environment, Forest and Climate Change Government of India, 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	2020
To year	2026

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Sukhna Wetland
Unofficial name (optional)	Sukhna Lake

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 Sukhna Wetland is situated in the northeast corner of Chandigarh at latitude 30°44'31.8" N and longitude 76°48'48.6" E, extending to latitude 30°48'19.8" N and longitude 76°52'43.5" E. This wetland is a dynamic system with seasonal fluctuations in water spread. It is delineated to encompass the ecologically functional landscape that contributes to and sustains the wetland's ecological integrity, hydrological processes and biodiversity values. The wetland is surrounded by Kaimbwala village and Nature Trail of Lake Reserve Forest on the northern side, forest plantation and agricultural fields of the village Suktetri on the east, boat club, cafeteria, part of bandh on the west and major part of bandh and Sukhna barrage in the South.

The total catchment area of the wetland is spread across 10395.72 acres out of which 7185.824 acres is the Catchment Area/Zone of Influence of Sukhna Lake falling within the boundary limit of UT Chandigarh, 684.482 acres is the Catchment Area/Zone of Influence of Sukhna Lake falling within the boundary limit of Punjab and 2525.417 acres is the Catchment Area/Zone of Influence of Sukhna Lake falling within the boundary limit of Haryana.

2.2.2 - General location

a) In which large administrative region does the site lie?	UT Chandigarh
b) What is the nearest town or population centre?	Chandigarh, S.A.S. Nagar, Punjab and Panchkula, Haryana

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): 199.51

Area, in hectares (ha) as calculated from GIS boundaries199.494

2.2.5 - Biogeography

Biogeographic regions	
Regionalisation scheme(s)	Biogeographic region
Freshwater Ecoregions of the World (FEOW)	Lower and Middle Indus (ID 703)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

☒ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

Sukhna Wetland has reports of six (06) endangered species viz. Egyptian Vulture (*Neophron percnopterus*), Pallas's Fish-Eagle (*Haliaeetus leucoryphus*), Indian Skimmer (*Rynchops albicollis*), Steppe Eagle (*Aquila nipalensis*), *Geoclemys hamiltonii* (black pond turtle;black pond turtle; spotted pond turtle;black spotted turtle;hamilton's terrapin;spotted pond turtle) and *Pteropus vampyrus* (indian flying fox;indian flying-fox), three (03) vulnerable species *Rusa unicolor* (cerf sambar;indian sambar;sambar;sambar deer), *Sterna aurantia* (Indian River Tern) and Common Pochard (*Aythya ferina*). Common Pochard (*Aythya ferina*) are recorded on average around 500 in the latest waterbird survey held in February 2026.

☒ Criterion 3 : Biological diversity

Justification

The mammalian fauna associated with Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge. Recorded species from the wetland include *Rusa unicolor*, *Boselaphus tragocamelus*, *Sus scrofa*, *Canis aureus*, *Viverricula indica*, *Paradoxurus hermaphroditus*, *Felis chaus*, *Hystrix indica*, *Semnopithecus entellus*, *Macaca mulatta*, *Lepus nigricollis*, *Urva edwardsii* and *Pteropus vampyrus*. Avifaunal diversity is particularly rich and reflects the wetland's role as a critical refuge and seasonal resource node within the Central Asian Flyway sub-region. On average, 29 species of waterbirds are recorded during the winter waterbird census, underscoring the wetland's significance as a seasonal aggregation site for migratory species. Key wintering waterbirds include *Aythya ferina*, *Tadorna ferruginea*, *Netta rufina*, *Aythya nyroca*, *Anas acuta*, *Anas querquedula*, *Platalea leucorodia*, *Dendrocygna javanica*, *Sarkidiornis melanotos*, *Anas penelope*, *Aquila nipalensis* and *Anas platyrhynchos*. Resident wetland-dependent species such as *Gallinula chloropus*, *Porphyrio poliocephalus*, *Hydrophasianus chirurgus*, *Dupetor flavicollis*, *Ixobrychus cinnamomeus*, and *Anas poecilorhyncha* further indicate year-round habitat functionality, including breeding, foraging and roosting support. The reptilian assemblage including *Geoclemys hamiltonii*, *Pangshura smithii*, *Naja naja*, *Ptyas mucosa*, *Bungarus caeruleus*, *Daboia russelii*, *Python molurus* and *Varanus bengalensis* reflects the presence of structurally diverse aquatic–terrestrial interface habitats such as marshes, shallow littoral zones and adjoining scrub ecosystems. These habitats provide essential refugia for ectothermic fauna and contribute to trophic regulation within the ecosystem. In addition, the wetland supports a rich invertebrate and microbial diversity, including butterflies, moths, odonates (dragonflies and damselflies), honeybees, crickets and other functional groups that form the basal trophic structure of the ecosystem.

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

Optional text box to provide further information

The wetland supports 16 species of waterbirds during breeding cycle by providing foraging and nesting grounds for White-breasted Waterhen (*Amaurornis phoenicurus*), Indian Spot-billed Duck (*Anas poecilorhyncha*), Intermediate Egret (*Ardea intermedia*), Purple Heron (*Ardea purpurea*), Indian Pond-Heron (*Ardeola grayii*), Western Cattle Egret (*Bubulcus ibis*), Little Egret (*Egretta garzetta*), Eurasian Moorhen (*Gallinula chloropus*), Pheasant-tailed Jacana (*Hydrophasianus chirurgus*), Little Cormorant (*Microcarbo niger*), Black-crowned Night-Heron (*Nycticorax nycticorax*), Glossy Ibis (*Plegadis falcinellus*), Grey-headed Swampphen (*Porphyrio poliocephalus*), Red-naped Ibis (*Pseudibis papillosa*), Little Grebe (*Tachybaptus ruficollis*) and Red-wattled Lapwing (*Vanellus indicus*).

In adverse condition (hydrological stress mostly) provides refuge, roosting and foraging grounds for 03 species which include Oriental Darter (*Anhinga melanogaster*), Lesser Whistling-Duck (*Dendrocygna javanica*) and Painted Stork (*Mycteria leucocephala*). Several species of reptiles forage and breed in the wetland which includes Brown roofed turtle (*Pangshura smithii*), Indian cobra (*Naja naja*), Indian rat snake (*Ptyas mucosa*), Common krait (*Bungarus caeruleus*), Russell's viper (*Daboia russelii*), Indian python (*Python molurus*) and Common Indian Monitor Lizard (*Varanus bengalensis*).

Fish species such as *Notopterus notopterus*, *Catla catla*, *Labeo rohita* and *Cirrhinus mrigala* utilize Sukhna wetland as a critical refuge habitat during periods of hydrological fluctuations, elevated temperatures and reduced flow conditions. The wetland also supports seasonal movement and migration of fish assemblages from adjoining upstream inlets and ephemeral drainage channels during dry periods. Shallow littoral zones, emergent vegetation and marsh interfaces provide important spawning, nursery, foraging and shelter habitats, while also reducing predation pressure and supporting juvenile recruitment and survival during ecologically stressful conditions.

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA/ LILIOPSIDA	<i>Apluda mutica</i>	☐	☒	☐		☐		This wetland sustains viable populations of <i>Apluda mutica</i> along with associated marshland vegetation.
TRACHEOPHYTA/ LILIOPSIDA	<i>Arundo donax</i>	☐	☒	☐	LC	☐		This wetland sustains viable populations of <i>Apluda mutica</i> along with associated marshland vegetation.
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Calotropis procera</i>	☐	☒	☐	LC	☐		hardy native species occurring in dry wetland fringes and supporting pollinator communities including butterflies, bees and other insects
TRACHEOPHYTA/ LILIOPSIDA	<i>Cymbopogon commutatus</i>	☐	☒	☐		☐		Native species occurring in elevated wetland margins in good abundance and supporting in stabilizing soils and reducing erosion along exposed wetland margins
TRACHEOPHYTA/ LILIOPSIDA	<i>Cynodon dactylon</i>	☐	☒	☐		☐		Perennial grass species providing foraging habitat for herbivorous fauna, invertebrates, pollinator communities and offering shelter and nesting material for ground-associated birds and small fauna.
TRACHEOPHYTA/ LILIOPSIDA	<i>Eulaliopsis binata</i>	☐	☒	☐		☐		perennial grass species providing foraging habitat for herbivorous fauna, invertebrates, pollinator communities and offering shelter and nesting material for ground-associated birds and small fauna.
TRACHEOPHYTA/ LILIOPSIDA	<i>Heteropogon contortus</i>	☐	☒	☐		☐		perennial grass species providing foraging habitat for herbivorous fauna, invertebrates, pollinator communities and offering shelter and nesting material for ground-associated birds and small fauna.
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Nelumbo nucifera</i>	☐	☒	☐		☐		Most common macrophyte of the Sukhna wetland providing providing spawning and nursery habitat for fish and aquatic fauna
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Senna tora</i>	☐	☒	☐		☐		Most common macrophyte of the Sukhna wetland providing providing spawning and nursery habitat for fish and aquatic fauna
TRACHEOPHYTA/ LILIOPSIDA	<i>Triplidium bengalense</i>	☐	☒	☐		☐		Most common macrophyte of the Sukhna wetland providing providing spawning and nursery habitat for fish and aquatic fauna
TRACHEOPHYTA/ LILIOPSIDA	<i>Typha elephantina</i>	☐	☒	☐	LC	☐		perennial grass species providing foraging habitat for herbivorous fauna, invertebrates, pollinator communities and offering shelter and nesting material for ground-associated birds and small fauna.

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								
Others																
CHORDATA / MAMMALIA	<i>Boselaphus tragocamelus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐	Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge. The wetland provides access to water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA / REPTILIA	<i>Bungarus caeruleus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐	Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA / MAMMALIA	<i>Canis aureus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐	Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge. The wetland provides access to water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA / REPTILIA	<i>Daboia russelii</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐	Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge. Actively used for foraging and shelter
CHORDATA / MAMMALIA	<i>Felis chaus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐	For food, rearing kittens. Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA / REPTILIA	<i>Geoclemys hamiltonii</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☒	☐	The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation, islands and shallow littoral zones utilized for nesting, young one rearing, foraging, shelter and protection from predators.
CHORDATA / MAMMALIA	<i>Herpestes edwardsi</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐	For accessing water, forage resources, shelter, and refuge during periods of environmental stress
CHORDATA / MAMMALIA	<i>Hystrix indica</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐	Sukhna Wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA / MAMMALIA	<i>Lepus nigricollis</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐	For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA / MAMMALIA	<i>Macaca mulatta</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐	For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA / REPTILIA	<i>Naja naja</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐	Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.

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/ REPTILIA	<i>Pangshura smithii</i>	☐	☒	☐	☐	☒	☐	☐	☐				NT	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation, islands and shallow littoral zones utilized for nesting, young one rearing, foraging, shelter and protection from predators.
CHORDATA/ MAMMALIA	<i>Paradoxurus hermaphroditus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA/ MAMMALIA	<i>Pteropus vampyrus</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐		For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA/ REPTILIA	<i>Ptyas mucosa</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/ REPTILIA	<i>Python molurus</i>	☒	☒	☐	☐	☒	☐	☐	☐				NT	☒	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/ MAMMALIA	<i>Rusa unicolor</i>	☒	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA/ MAMMALIA	<i>Semnopithecus entellus</i>	☒	☐	☐	☐	☒	☐	☐	☐				LC	☒	☐		For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA/ MAMMALIA	<i>Sus scrofa</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		For accessing water, forage resources, shelter and refuge during periods of environmental stress
CHORDATA/ REPTILIA	<i>Varanus bengalensis</i>	☒	☒	☐	☐	☒	☐	☐	☐				NT	☒	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/ MAMMALIA	<i>Viverricula indica</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		For accessing water, forage resources, shelter and refuge during periods of environmental stress
Fish, Mollusc and Crustacea																	
CHORDATA/ ACTINOPTERYGII	<i>Cirrhinus mrigala</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation, islands and shallow littoral zones utilized for nesting, young one rearing, foraging, shelter and protection from predators.
CHORDATA/ ACTINOPTERYGII	<i>Gibelion catla</i>	☐	☒	☐	☐	☒	☐	☐	☐					☐	☐		Sukhna wetlands act as critical refuge habitats during periods of hydrological stress, elevated temperatures and gives hydrological connectivity for sustaining carp populations, reduce mortality during early developmental stages and supporting recruitment success.
CHORDATA/ ACTINOPTERYGII	<i>Labeo rohita</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		Sukhna wetlands act as critical refuge habitats during periods of hydrological stress, elevated temperatures and gives hydrological connectivity for sustaining carp populations, reduce mortality during early developmental stages and supporting recruitment success.

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/ ACTINOPTERYGII	<i>Notopterus notopterus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		Sukhna wetlands act as critical refuge habitats during periods of hydrological stress, elevated temperatures and gives hydrological connectivity for sustaining fish populations, reduce mortality during early developmental stages and supporting recruitment success.
Birds																	
CHORDATA/ AVES	<i>Actitis hypoleucos</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/ AVES	<i>Amaurornis phoenicurus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during periods of hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones that are utilized for nesting, brood rearing, foraging, shelter and prote
CHORDATA/ AVES	<i>Anas acuta</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Anas crecca</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Anas platyrhynchos</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Anas poecilorhyncha</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Anastomus oscitans</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance.
CHORDATA/ AVES	<i>Anhinga melanogaster</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators
CHORDATA/ AVES	<i>Anser anser anser</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Anser indicus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.

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		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	<i>Aquila nipalensis</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☐	☒		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Ardea alba</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Ardea cinerea</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Ardea intermedia</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Ardea purpurea</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		Food and shelter
CHORDATA/ AVES	<i>Ardeola grayii</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Aythya ferina</i>	☒	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Aythya fuligula</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Aythya nyroca</i>	☐	☐	☐	☐	☒	☐	☐	☐				NT	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Bubulcus ibis</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Calidris pugnax</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Calidris temminckii</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.

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	<i>Charadrius alexandrinus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Charadrius dubius</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Chlidonias hybrida</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Chroicocephalus brunnicephalus</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Ciconia episcopus</i>	☐	☐	☐	☐	☒	☐	☐	☐				NT	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Dendrocygna javanica</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Dupetor flavicollis</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Egretta garzetta</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Fulica atra</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Gallinago gallinago</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/ AVES	<i>Gallinula chloropus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/ AVES	<i>Gallus gallus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance.

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	<i>Gyps himalayensis</i>	☐	☐	☐	☐	☒	☐	☐	☐				NT	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Haliaeetus leucoryphus</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☐	☒		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Himantopus himantopus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance.
CHORDATA/AVES	<i>Hirundo smithii</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Food and shelter
CHORDATA/AVES	<i>Hydrophasianus chirurgus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/AVES	<i>Ichthyaetus ichthyaetus</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Ixobrychus cinnamomeus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Limosa limosa</i>	☐	☐	☐	☐	☒	☐	☐	☐				NT	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Mareca penelope</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Mareca strepera</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Merops orientalis</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Microcarbo niger</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.

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	<i>Mycteria leucocephala</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and trees utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/AVES	<i>Neophron percnopterus</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☐	☒		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Netta rufina</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Numenius arquata</i>	☐	☐	☐	☐	☒	☐	☐	☐				NT	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Nycticorax nycticorax</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/AVES	<i>Ocyrceros birostris</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Ortygornis pondicerianus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Pavo cristatus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Phalacrocorax carbo</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Platalea leucorodia</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Plegadis falcinellus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.

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	<i>Porphyrio porphyrio poliocephalus</i>	☐	☒	☐	☐	☒	☐	☐	☐					☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/AVES	<i>Pseudibis papillosa</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/AVES	<i>Psittacula eupatria</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Psittacula krameri</i>	☐	☐	☐	☐	☒	☐	☐	☐					☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Recurvirostra avosetta</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.
CHORDATA/AVES	<i>Rynchops albicollis</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Sarkidiornis melanotos</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Spatula clypeata</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Spatula querquedula</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Sterna aurantia</i>	☒	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Tachybaptus ruficollis</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.

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	<i>Tadorna ferruginea</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Threskiornis melanocephalus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Tringa erythropus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Tringa glareola</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Tringa ochropus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Tringa stagnatilis</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Tringa totanus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Migratory waterbird assemblage along the Central Asian Flyway. It utilizes the wetland as a seasonal wintering and foraging habitat, thereby linking distant breeding and non-breeding grounds.
CHORDATA/AVES	<i>Vanellus indicus</i>	☐	☒	☐	☐	☒	☐	☐	☐				LC	☐	☐		The wetland provides critical refuge during hydrological fluctuations and elevated temperatures. The wetland provides dense emergent vegetation and shallow littoral zones utilized for nesting, brood rearing, foraging, shelter and protection from predators.
CHORDATA/AVES	<i>Vanellus leucurus</i>	☐	☐	☐	☐	☒	☐	☐	☐				LC	☐	☐		Maintaining food web structure and trophic balance. Sukhna wetland reflects a characteristic assemblage of species adapted to the ecotonal landscape of the Shivalik foothills, where forest, scrub, grassland and wetland habitats converge.

1) Percentage of the total biogeographic population at the site

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

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Duck Community	☒	It is mainly composed of Common Pochard (<i>Aythya farina</i>) and Ferruginous Pochard (<i>Aythya nyroca</i>) that are especially adapted to the freshwater habitat and occupy critical habitats in the site.	Common Pochard (<i>Aythya farina</i>) is a vulnerable species in
Stork Community	☐	The Stork Community is mainly composed of Asian Woollynecked Stork (<i>Ciconia episcopus</i>), Painted Stork (<i>Mycteria leucocephala</i>) and Asian openbill stork (<i>Anastomus oscitans</i>)	The stork community has more than one species which includes Asian Woollynecked Stork (<i>Ciconia episcopus</i>), and Painted Stork (<i>Mycteria leucocephala</i>) which are Near threatened species as per IUCN Red List.
Raptor Community	☒	Steppe Eagle – <i>Aquila nipalensis</i> Marsh Harrier – <i>Circus aeruginosus</i> (Western Marsh Harrier) Greater Spotted Eagle – <i>Clanga clanga</i> Himalayan Griffon – <i>Gyps himalayensis</i>	Passage and migratory raptors reported from the Sukhna wetland and its catchment

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

4.1 - Ecological character

Sukhna wetland is a human-made, rainfed wetland located in the north-eastern part of Chandigarh (30°44'31.8" N to 30°48'19.8" N; 76°48'48.6" E to 76°52'43.5" E) at the interface of the Shivalik foothills and the Indo-Gangetic plains. The wetland represents a dynamic fluvial-lacustrine ecosystem whose ecological character is primarily governed by seasonal rainfall, episodic inflows and catchment-driven sediment dynamics. Hydrologically, it is sustained by two major ephemeral hill streams, Kansal and Saketri, which originate in the Shivalik catchments and convey monsoon-driven runoff into the system. These streams, along with their tributaries including the Nepli and Ghareri sub-channels, converge to form the Sukhna choe, which also serves as the outflow linking the wetland to the Ghaggar River basin. The catchment exhibits a dendritic to sub-dendritic drainage pattern with marked spatial variability in runoff response; the Ghareri sub-catchment shows high drainage density and rapid runoff generation, while Kansal is characterized by longer stream networks influenced by steeper slopes and geological heterogeneity. The Sukhna wetland functions as a sediment-intercepting reservoir at the base of steep Shivalik slopes, making it a critical control point for erosion regulation, downstream flood moderation and particulate nutrient retention, which in turn influence productivity and habitat quality within the system. The wetland area shows temporal water fluctuations and its surroundings comprise distinct habitat zones forming gradients from open water through littoral zones, riparian vegetation, scrub, forest, agricultural landscapes and ephemeral stream channels, together supporting high ecological connectivity across aquatic and terrestrial interfaces. Sukhna wetland acts as a peri-urban biodiversity refuge embedded within a high human-use matrix, where recreational pressure and edge effects coexist with conservation values. This habitat supports migratory waterbirds like *Aythya ferina*, *Tadorna ferruginea*, *Aythya nyroca*, *Anas acuta* and *Platalea leucorodia* collectively indicating the wetland's role as part of the Central Asian Flyway, functioning as a seasonal feeding, roosting and wintering habitat that supports migratory connectivity and energy transfer across regions. Reptilian diversity, *Geoclemys hamiltonii*, *Pangshura smithii*, *Naja naja* and *Python molurus* etc. reflects the ecological integrity of aquatic-terrestrial interface habitats such as shallow littoral zones and riparian buffers.

Major challenges for scientific management of Sukhna wetland are inflow of silt from its catchment area and invasive species proliferation. For scientific management of Sukhna Wetland notified under Wetland (Conservation & Management) Rules 2017 an Integrated Management Plan has been prepared covering all aspects. To check soil erosion from the catchment several soil and moisture conservation works including vegetative and engineering measures are taken up as a result of which the silt load has significantly reduced. Proliferation of weed is being addressed through periodic removal of weeds from wetland. Overall, the Wetland health ((standardized monitoring as per India's Wetlands (Conservation and Management) Rules, 2017)) of Sukhna Wetland is assessed as moderate to good, reflecting a functioning but dynamic system influenced by hydrological variability, catchment pressures and invasive species while still maintaining significant ecological character and biodiversity value within the Shivalik-Indo-Gangetic landscape continuum.

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

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
6: Water storage areas/Reservoirs	Sukhna Lake	1	199.51

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
NA	

(ECD) Habitat connectivity NA

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Cannabis sativa sativa</i>	Potential
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Parthenium hysterophorus</i>	Potential
TRACHEOPHYTA/LILIOPSIDA	<i>Pontederia crassipes</i>	Actual (minor impacts)

Optional text box to provide further information

Other noteworthy plant species include *Acacia catechu* (Khair), *Bombax ceiba* (Semul), *Acacia arabica* (Kikar), *Azadirachta indica* (Neem), *Dalbergia sissoo* (Shisham), *Zizyphus jujube* (Ber), *Murraya koengii* (Kari patta), *Carissa spinarum* (Karaunda), *Adhatoda vasica* (Vasaka), *Abrus precatorius* (Rati), *Saccharum munja*, *Zizyphus numularia*, *Cassia tora*, *Saccharum munja*, *S. spontaneum* and *Desmostachya* sp.

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/REPTILIA	<i>Trachemys scripta elegans</i>	Actual (minor impacts)
CHORDATA/ACTINOPTERYGII	<i>Ctenopharyngodon idella</i>	Actual (minor impacts)
CHORDATA/ACTINOPTERYGII	<i>Cyprinus carpio</i>	Actual (minor impacts)
CHORDATA/ACTINOPTERYGII	<i>Hypophthalmichthys molitrix</i>	Actual (minor impacts)
CHORDATA/ACTINOPTERYGII	<i>Pterygoplichthys anisitsi</i>	Potential

Optional text box to provide further information

The mammalian fauna found in Sukhna wetland includes Sambar (*Rusa unicolor*), Nilgai (*Boselaphus tragocamelus*), Wild boar (*Sus scrofa*), Golden jackal (*Canis aureus*), Small Indian civet (*Viverricula indica*), Asian Palm Civet (*Paradoxurus hermaphroditus*) Jungle cat (*Felis chaus*), Indian crested porcupine (*Hystrix indica*), Hanuman langur (*Semnopitheaus entellus*), Rhesus macaque (*Macaca mulatta*), Indian hare (*Lepus nigricollis*), Indian grey mongoose (*Urva edwardsii*), Indian flying fox (*Pteropus medius*) etc. Prominent avifauna includes Indian peafowl (*Pavo cristatus*), Red junglefowl (*Gallus gallus*), Grey francolin (*Ortygornis pondicerianus*), Wire-tailed Swallows (*Hirundo smithii*), Green bee-eaters (*Merops orientalis*), Steppe Eagle (*Aquila nipalensis*) and several other species belonging to families like Passeriformes, Columbiformes, Piciformes, etc. On average, 29 species of waterbirds are spotted during the winter waterbird census. Important waterbirds reported in Sukhna wetland include Common Pochard (*Aythya farina*), Ruddy Shelduck (*Tadorna ferruginea*), Red-crested Pochard (*Netta rufina*), Ferruginous Pochard (*Aythya nyroca*), Northern Pintail (*Anas acuta*), Garganey (*Anas querquedula*), Eurasian Spoonbill (*Platalea leucorodia*), Lesser-whistling Duck (*Dendrocygna javanica*), Knob-billed Duck (*Sarkidiornis melanotos*), Eurasian Wigeon (*Anas Penelope*), Mallard (*Anas platyrhynchos*), etc., resident birds like Common Moorhen (*Gallinula chloropus*), Grey-headed swampphen (*Porphyrio poliocephalus*), Pheasant-tailed Jacana (*Hydrophasianus chirurgus*), Black Bittern (*Dupetor flavicollis*), Cinnamon Bittern (*Ixobrychus cinnamomeus*), Indian spot-billed duck (*Anas poecilorhyncha*) etc. can be spotted all through the year. Several species of reptiles have also been reported from the wetland which includes species like Spotted Pond Turtle (*Geoclemys hamiltonii*), Brown roofed turtle (*Pangshura smithii*), Indian cobra (*Naja naja*), Indian rat snake (*Ptyas mucosa*), Common krait (*Bungarus caeruleus*), Russell's viper (*Daboia russelii*), Indian python (*Python molurus*), and Common Indian Monitor Lizard (*Varanus bengalensis*).

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cwa: Humid subtropical (Mild with dry winter, hot 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.

Ghaggar River Basin

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 ☒

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 precipitation	☒	No change

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) ☒

Mixohaline (brackish)/Mixosaline (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 ☒

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 ☐

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Low
Wetland non-food products	Other	not relevant for site

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Erosion protection	Soil, sediment and nutrient retention	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Low
Climate regulation	Local climate regulation/buffering of change	Medium
Biological control of pests and disease	Support of predators of agricultural pests (e.g., birds feeding on locusts)	Medium
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Water sports and activities	High
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Inspiration	Medium
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	Medium
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)	Medium
Scientific and educational	Long-term monitoring site	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	Medium
Nutrient cycling	Carbon storage/sequestration	Medium
Pollination	Support for pollinators	Medium

Within the site: 10000s

Outside the site: 100000s

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	☒	☒

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	☐	☒

5.1.2 - Management authority

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

Forests and Wildlife Department, UT Chandigarh, Estate office/ Revenue Department/CMC UT Chandigarh, Municipal corporation UT Chandigarh, Department of Environment UT Chandigarh, Urban Planning, UT Chandigarh, Engineering and water resources Department, UT Chandigarh, Animal Husbandry and Fisheries Department, UT Chandigarh, Tourism Department, UT Chandigarh, CITCO, UT Chandigarh, Pollution Control Committee, UT Chandigarh, Department of Science and Technology UT Chandigarh, Sports Department UT Chandigarh

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

Member Secretary, Wetland Authority, UT Chandigarh.

Postal address:

Forest & Wildlife, UT Chandigarh, Paryavaran Bhawan Building [2nd Floor], Sector-19B, Madhya Marg, Chandigarh-160019

E-mail address:

cf.chandigarh@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
Housing and urban areas	Low impact	Low impact	☐	☒
Tourism and recreation areas	Low impact	Medium impact	☒	☒

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Non specified	Low impact	Low impact	☒	☒

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	Low impact	Low impact	☒	☒

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	Medium impact	High impact	☒	☒

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	Low impact	Medium impact	☒	☒
Agricultural and forestry effluents	Medium impact	High impact	☒	☒
Garbage and solid waste	Low impact	Low impact	☒	☐

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	Low impact	Medium impact	☒	☒
Temperature extremes	Medium impact	High impact	☒	☒
Storms and flooding	Low impact	Low impact	☐	☒

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Declared as a wetland under Wetland Rules, 2017	Sukhna Wetland	https://chandigarh.gov.in/green-chandigarh/sukhna-wildlife-sanctuary	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
Land conversion controls	Implemented
Improvement of water quality	Partially implemented
Re-vegetation	Implemented
Habitat manipulation/enhancement	Partially implemented
Catchment management initiatives/controls	Implemented
Hydrology management/restoration	Partially implemented
Soil management	Partially implemented

Species

Measures	Status
Control of invasive alien plants	Partially implemented
Control of invasive alien animals	Proposed
Threatened/rare species management programmes	Partially implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Implemented
Research	Proposed
Regulation/management of wastes	Implemented
Fisheries management/regulation	Implemented
Regulation/management of recreational activities	Proposed
Communication, education, and participation and awareness activities	Proposed
Harvest controls/poaching enforcement	Implemented

5.2.5 - Management planning

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

Has a management effectiveness assessment been undertaken for the site? Yes ☐ 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:

Yes.

With an aim to educate the citizen & visitors of Chandigarh about the importance of nature & natural resources in general & the biodiversity of Sukhna Wildlife Sanctuary in particular, a Nature Interpretation Centre (NIC) has been set up at Regulator End of Sukhna wetland. The NIC provides a common place to the visitors to know about the Importance of Wetland Ecosystems, Flora & Fauna of Sukhna Wildlife Sanctuary & other necessary tourist information on City Beautiful. The NIC was inaugurated on 20th December 2013 by Sh. K. K. Sharma, IAS, Adviser to Administrator, UT Chandigarh.

5.2.6 - Planning for restoration

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

Further information

Management for Sukhna wetland will be carried out as per the approved Integrated Management Plan.

5.2.7 - Monitoring implemented or proposed

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

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

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Mishra, P.R., Mittal, S.P. & Bansal, R.C. (1978). Managing land & water resources of Siwaliks. Proc. Nat. Sym. On "Land & Water Management in the Indus Basin (India)". Vol. I. Land an

6.1.2 - Additional reports and documents

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

<no file available>

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

<1 file(s) uploaded>

vi. other published literature

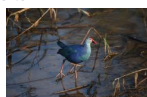
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6.1.3 - Photograph(s) of the Site

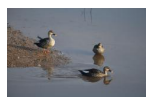
Please provide at least one photograph of the site:



Awareness walk for the Sukhna Wetland (Chandigarh Forest Department, 02-02-2026)



Grey-headed Swamphen (Chandigarh Forest Department, 15-02-2026)



Indian Spot-billed Duck (Chandigarh Forest Department, 15-02-2026)



Ruddy Shelduck (Gitanjali Kanwar, 20-02-2026)



Common Pochard (Gitanjali Kanwar, 20-02-2026)



View of Sukhna wetland (Chandigarh Forest Department, 20-02-2026)



Sukhna Wetland (Chandigarh Forest Department, 05-10-2025)



Walkathon on WWD 2026 (Chandigarh Forest Department, 02-02-2026)



Sukhna Wetland (Chandigarh Forest Department, 05-10-2025)

6.1.4 - Designation letter and related data

Designation letter

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Date of Designation	2026-03-16
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