Annotated List of Wetlands of International Importance

India

49 Ramsar Site(s) covering 1,093,636 ha

Asan Conservation Reserve
Site number: 2,437 | Country: India | Administrative region: Uttarakhand
Area: 444.4 ha | Coordinates: 30°26'01"N 77°40'58"E | Designation dates: 21-07-2020

View Site details in RSIS

The Asan Conservation Reserve is a 444-hectare stretch of the Asan River running down to its confluence with the Yamuna River in Dehradun district of Uttarakhand. The damming of the River by the Asan Barrage in 1967 resulted in siltation above the dam wall, which helped to create some of the Site's bird-friendly habitats. These habitats support 330 species of birds including the critically endangered red-headed vulture (Sarcogyps calvus), white-rumped vulture (Gyps bengalensis) and Baer's pochard (Aythya baeri). More than 1% of the biogeographical populations of two waterbird species have been recorded, these being red-crested pochard (Netta rufina) and ruddy shelduck (Tadorna ferruginea). Other non-avian species present include 49 fish species, one of these being the endangered Putitor mahseer (Tor putitora). Fish use the site for feeding, migration and spawning. As well as this support for biodiversity and the hydro-electricity production of the Barrage, the Site's role in maintaining hydrological regimes is important.

Ashtamudi Wetland
Site number: 1,204 | Country: India | Administrative region: Kerala State
Area: 6,140 ha | Coordinates: 08°57'N 76°34'59"E | Designation dates: 19-08-2002

View Site details in RSIS

Ashtamudi Wetland. 19/08/02. Kerala. 61,400 ha. 08°57'N 076°35'E. An extensive estuarine system, the second largest in Kerala State, which is of extraordinary importance for its hydrological functions, its biodiversity, and its support for fish. The site supports a number of mangrove species as well as over 40 associated plant species, and 57 species of birds have been observed, including six that are migratory. Nearly 100 species of fish sustain a lively fishing industry, with thousands of fishermen depending directly upon the estuary for their livelihood. Population density and urban pressures pose threats to the site, including pollution from oil spills from thousands of fishing boats and from industries in the surrounding area and conversion of natural habitat for development purposes. Ramsar site no. 1204. Most recent RIS information: 2002.
Bakhira Wildlife Sanctuary
Site number: 2,465 | Country: India | Administrative region: The site is situated in Sant Kabir Nagar district in the state of Uttar Pradesh.
Area: 2,894 ha | Coordinates: 26°54'36"N 83°07'47"E | Designation dates: 29-06-2021
View Site details in RSIS

This freshwater marsh in the Sant Kabir Nagar district is the largest natural floodplain wetland of eastern Uttar Pradesh. The Sanctuary was established in 1980 and is protected under the Wildlife Protection Act (1972); an “eco-sensitive zone” extends up to a kilometre around its boundary. The wetland is internationally important for its birdlife as it supports over 80 species. It provides a wintering ground for over 25 species which migrate on the Central Asian Flyway, some of which are threatened or near-threatened such as the endangered Egyptian vulture (*Neophron per henopterus*), the vulnerable greater spotted eagle (*Aquila clanga*), common pochard (*Aythya ferina*) and swamp francolin (*Francolinus gularis*), and the near-threatened oriental darter (*Anhinga melanogaster*) and woolly-necked stork (*Ciconia episcopus*). The wetland also supports 119 plant species and 45 species of fish: it is home to the vulnerable European carp (*Cyprinus carpio*) and the catfish *Wallago attu*, and the near-threatened Gangetic aila (*Ailia coila*) and silver carp (*Hypophthalmichthys molitrix*). The Site is also used for recreation and tourism and contributes to food supply and nutrient cycling.

Beas Conservation Reserve
Site number: 2,408 | Country: India | Administrative region: Hoshiarpur, Amritsar, Gurdaspur, Kaputhala, Jalandhar, Tarn Taran
Area: 6,428.9 ha | Coordinates: 31°23'41"N 75°11'40"E | Designation dates: 26-09-2019
View Site details in RSIS

The Beas Conservation Reserve is a 185-kilometre stretch of the Beas River located primarily in the north-west of the State of Punjab. The River meanders down from the Himalayan foothills to the Harike Headworks, where its course is diverted into a number of channels. The River is dotted with islands, sand bars and braided channels creating a complex environment supporting substantial biodiversity. More than 500 species of birds are documented along this stretch, along with more than 90 fish species. The Reserve also hosts the only known population in India of the endangered Indus river dolphin (*Platanista gangetica minor*). Further threatened species include the endangered masheer (*Tor putitora*) and hog deer (*Axis porcinus*) as well as the vulnerable smooth-coated otter (*Lutrogale perspicillata*). In 2017, a programme was initiated to re-introduce the critically endangered gharial (*Gavialis gangeticus*) with 47 individuals released into the River 30 years after their disappearance. Major threats include urban and domestic pollution as well as impacts of agriculture along most of the River’s course. The Department of Forests and Wildlife Preservation, Punjab, conduct the scientific management of the wetland.

Bhindawas Wildlife Sanctuary
Site number: 2,459 | Country: India | Administrative region: Rohtak, Haryana
Area: 412 ha | Coordinates: 28°32'01"N 76°33'01"E | Designation dates: 25-05-2021
View Site details in RSIS

Bhindawas Wildlife Sanctuary is a human-made freshwater wetland, and is the largest wetland in Haryana State. The wetland was declared as a protected area in 1986 and was designated as an Eco-sensitive zone by the Ministry of Environment, Forests and Climate Change in 2011. Over 250 species use the Sanctuary throughout the year as a resting and roosting site. The Site supports more than ten globally threatened species including the endangered Egyptian vulture (*Neophron percnopterus*), steppe eagle (*Aquila nipalensis*), Pallas’s fish eagle (*Haliaeetus leucoryphus*) and black-bellied tern (*Sterna acuticauda*). The Site regularly supports more than 1.7% of the biogeographic population of greylag goose (*Anser anser*) and more than 2% of the biogeographic population of Indian cormorant (*Phalacrocorax fuscicolli*). Mammals recorded at the Site include nilgai (*Boselaphus tragocamelus*), common mongoose (*Herpestes edwardsi*), and black-naped hare (*Lepus nigricollis*). The Sanctuary contributes to maintaining the region’s water table by recharging groundwater, and is also a natural flood buffer.
Bhitarkanika Mangroves
Site number: 1,205 | Country: India | Administrative region: Orissa
Area: 65,000 ha | Coordinates: 20°39'N 86°54'E | Designation dates: 19-08-2002
View Site details in RSIS

Bhitarkanika Mangroves. 19/08/02. Orissa. 65,000 ha. 20°39'N 086°54'E. Wildlife Sanctuary. One of the finest remaining patches of mangrove forests along the Indian coast - 25 years of continued conservation measures have made the site one of the best known wildlife sanctuaries. The site's Gahirmatha beach is said to host the largest known Olive Ridley sea turtle nesting beach in the world, with half a million nesting annually, and the site has the highest density of saltwater crocodile in the country, with nearly 700 Crocodylus porosus. It is a major breeding and wintering place for many resident and migratory waterbirds and is the east coast's major nursery for brackish water and estuarine fish fauna. Like many mangrove areas, the dense coastal forests provide vital protection for millions of people from devastating cyclones and tidal surges - of India's 58 recorded species of mangroves, 55 species are found in Bhitarkanika, a wider mangrove diversity than in the Sundarbans! Traditionally, sustainable harvesting of food, medicines, tannins, fuel wood, and construction materials, and particularly honey and fish, has been the rule, but population pressures and encroachment may threaten that equilibrium. Ramsar site no. 1205. Most recent RIS information: 2002.

Bhoj Wetland
Site number: 1,206 | Country: India | Administrative region: Madhya Pradesh
Area: 3,201 ha | Coordinates: 23°13'59"N 77°19'59"E | Designation dates: 19-08-2002
View Site details in RSIS

Bhoj Wetland. 19/08/02. Madhya Pradesh. 3,201 ha. 23°14'N 077°20'E. Two contiguous human-made reservoirs - the "Upper Lake" was created in the 11th century by construction of an earthen dam across the Kolans River, and the lower was constructed nearly 200 years ago, largely from leakage from the Upper, and is surrounded by the city of Bhopal. The lakes are very rich in biodiversity, particularly for macrophytes, phytoplankton, zooplankton, both natural and cultured fish species, both resident and migratory birds, insects, and reptiles and amphibians. Since implementation of a management action plan was begun in 1995 with financial support from the government of Japan, a number of bird species have been sighted which had rarely or never before been seen in the region. WWF-India has been of great assistance in preparing the site's designation. A photo essay is available at http://ramsar.org/photo_essay_india_bhoj.htm. Ramsar site no. 1206. Most recent RIS information: 2002.

Chandertal Wetland
Site number: 1,569 | Country: India | Administrative region: Himachal Pradesh State
Area: 49 ha | Coordinates: 32°28'59"N 77°36'E | Designation dates: 08-11-2005
View Site details in RSIS

Chandertal Wetland. 08/11/05; Himachal Pradesh, 49 ha; 32°29'N 077°36'E. A high altitude lake on the upper Chandra valley flowing to the Chandra river of the Western Himalayas (4,337m asl.) near the Kunzam pass joining the Himalayan and Pir Panchal ranges. It supports CITES and IUCN Redlisted Snow Leopard and is a refuge for many species like Snow Cock, Chukor, Black Ring Stilt, Kestrel, Golden Eagle, Chough, Red Fox, Himalayan Ibex, and Blue Sheep. These species, over the years, have developed special physiological features as adaption strategies to cold arid climate, intense radiation, and oxygen deficiency. Some 65% of the larger catchment is degraded forest due to overgrazing by the nomadic herdsmen, while 35% are covered by grasslands. Other threatening factors to this fragile and sparse vegetation are summer trekking, littering waste, and lack of sanitation facilities. Since declaring the site a nationally important wetland in 1994, the authorities have been providing funds for ecotourism facilities. Spiti Forest Department is the custodian and State Council of Science, Technology and Environment is coordinating conservation management. Ramsar site no. 1569. Most recent RIS information: 2005.
**Chilika Lake**

Site number: 229  |  Country: India  |  Administrative region: Orissa State

Area: 116,500 ha  |  Coordinates: 19°42'N 85°21'E  |  Designation dates: 01-10-1981

View Site details in RSIS

Chilika Lake. 01/10/81; Orissa; 116,500 ha; 19°42'N 085°21'E. Added to the Montreux Record, 16 June 1993; removed from the Record, 11 November 2002. Brackish lake separated from the Bay of Bengal by a long sandy ridge and subject to sea water exchange, resulting in extreme seasonal fluctuations in salinity in different sections of the lake. Saline areas support aquatic algae. The site is an important area for breeding, wintering and staging for 33 species of waterbirds. It also supports 118 species of fish, including commercially important species. Significant numbers of people are dependent upon the lake’s resources. Placed on the Montreux Record in 1993 due to problems caused by siltation and sedimentation which was choking the mouth of the lake; removed from the Record in 2002 following rehabilitation efforts for which the Chilika Development Authority received the Ramsar Wetland Conservation Award for 2002. Subject of a Ramsar Advisory Mission, 2001. Ramsar site no. 229.

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**Deepor Beel**

Site number: 1,207  |  Country: India  |  Administrative region: Assam

Area: 4,000 ha  |  Coordinates: 26°07'59"N 91°39'E  |  Designation dates: 19-08-2002

View Site details in RSIS

Deepor Beel. 19/08/02. Assam. 4,000 ha. 26°08'N 091°39'E. Sanctuary. A permanent freshwater lake in a former channel of the Brahmaputra river, of great biological importance and also essential as the only major storm water storage basin for the city of Guwahati. The beel is a staging site on migratory flyways and some of the largest concentrations of aquatic birds in Assam can be seen, especially in winter. Some globally threatened birds are supported, including Spotbilled Pelican (Pelecanus philippensis), Lesser and Greater Adjutant Stork (Leptoptilos javanicus and dubius), and Baer’s Pochard (Aythya baeri). The 50 fish species present provide livelihoods for a number of surrounding villages, and nymphaea nuts and flowers, as well as ornamental fish, medicinal plants, and seeds of the Giant water lily Euryale ferox provide major revenue sources in local markets; orchids of commercial value are found in the neighboring forest. Potential threats include over-fishing and hunting pressure upon waterbirds, pollution from pesticides and fertilizers, and infestation by water hyacinth Eichhornia crassipes. A proposal to create a sewage canal from the city directly to the beel is considered to be disastrous in its potential effects. Ramsar site no. 1207. Most recent RIS information: 2002.

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**East Calcutta Wetlands**

Site number: 1,208  |  Country: India  |  Administrative region: West Bengal

Area: 12,500 ha  |  Coordinates: 22°27'N 88°27'E  |  Designation dates: 19-08-2002

View Site details in RSIS

East Calcutta Wetlands. 19/08/02. West Bengal. 12,500 ha. 22°27'N 088°27'E. World-renowned as a model of a multiple use wetland, the site’s resource recovery systems, developed by local people through the ages, have saved the city of Calcutta from the costs of constructing and maintaining waste water treatment plants. The wetland forms an urban facility for treating the city’s waste water and utilizing the treated water for pisciculture and agriculture, through the recovery of nutrients in an efficient manner - the water flows through fish ponds covering about 4,000 ha, and the ponds act as solar reactors and complete most of their bio-chemical reactions with the help of solar energy. Thus the system is described as "one of the rare examples of environmental protection and development management where a complex ecological process has been adopted by the local farmers for mastering the resource recovery activities" (RIS). The wetland provides about 150 tons of fresh vegetables daily, as well as some 10,500 tons of table fish per year, the latter providing livelihoods for about 50,000 people directly and as many again indirectly. The fish ponds are mostly operated by worker cooperatives, in some cases in legal associations and in others in cooperative groups whose tenurial rights are under legal challenge. A potential threat is seen in recent unauthorized use of the waste water outfall channels by industries which add metals to the canal sludge and threaten the edible quality of the fish and vegetables. Ramsar site no. 1208. Most recent RIS information: 2002.
Haiderpur Wetland
Site number: 2,463 | Country: India | Administrative region: Uttar Pradesh
Area: 6,908 ha | Coordinates: 29°24'59"N 78°00'59"E | Designation dates: 13-04-2021
View Site details in RSIS

This human-made wetland was formed in 1984 by the construction of the Madhya Ganga Barrage on a floodplain of the River Ganga. It is located within the boundaries of Hastinapur Wildlife Sanctuary. Haiderpur Wetland provides habitat for numerous animal and plant species, including more than 30 species of plants, over 300 species of birds including 102 waterbirds, more than 40 fish and more than ten mammal species. This diverse habitat supports more than 15 globally threatened species, such as the critically endangered gharial (*Gavialis gangeticus*) and the endangered hog deer (*Axis porcinus*), black-bellied tern (*Sternula acuticuadua*), steppe eagle (*Aquila nipalensis*), Indian skimmer (*Rynchops albicollis*) and gold mahseer (*Tor putitora*). The Site supports more than 25,000 waterbirds, serves as a breeding site for the near-threatened Indian grassbird (*Graminicola bengalensis*) and provides refuge to the northern subspecies population of the vulnerable swamp deer (*Rucervus duvaucelii*) during its seasonal flood-driven migration. The Site also regularly supports more than 1% of the population of greylag goose (*Anser anser*) and bar-headed goose (*Anser indicus*). Haiderpur Wetland also helps to support the livelihoods of the local communities, and contributes to the maintenance of hydrological regimes and to hazard reduction. It is used for recreation and tourism, and scientific and educational activities are also associated with the Site.

Harike Lake
Site number: 462 | Country: India | Administrative region: Punjab
Area: 4,100 ha | Coordinates: 31°13'N 75°12'E | Designation dates: 23-03-1990
View Site details in RSIS

Harike Lake. 23/03/90; Punjab; 4,100 ha; 31°13'N 075°12'E. Bird Sanctuary. A shallow water reservoir with thirteen islands, at the confluence of two rivers. Dense floating vegetation covers 70% of the lake. An important site for breeding, wintering and staging birds, supporting over 200,000 Anatidae (ducks, geese, swans, etc.) during migration. The entire lake is leased on an annual basis to commercial fishery organizations. Ramsar site no. 462. Most recent RIS information: 1990.

Hokera Wetland
Site number: 1,570 | Country: India | Administrative region: Jammu and Kashmir State
Area: 1,375 ha | Coordinates: 34°04'59"N 74°42'E | Designation dates: 08-11-2005
View Site details in RSIS

Hokera Wetland. 08/11/05; Jammu & Kashmir; 1,375 ha; 34°05'N 074°42'E. Located at the northwest Himalayan biogeographic province of Kashmir, back of the snow-draped Pir Panchal (1,584m asl.), Hokera wetland is only 10 km from scenic paradise of Srinagar. A natural perennial wetland contiguous to the Jhelum basin, it is the only site with remaining reedbeds of Kashmir and pathway of 68 waterfowl species like Large Egret, Great Crested Grebe, Little Cormorant, Common Shelduck, Tufted Duck and endangered White-eyed Pochard, coming from Siberia, China, Central Asia, and Northern Europe. It is an important source of food, spawning ground and nursery for fishes, besides offering feeding and breeding ground to a variety of water birds. Typical marshy vegetation complexes inhabit like Typha, Phragmites, Eleocharis, Trapa, and Nymphoïdes species ranging from shallow water to open water aquatic flora. Sustainable exploitation of fish, fodder and fuel is significant, despite water withdrawals since 1999. Potential threats include recent housing facilities, littered garbage, and demand for increasing tourist facilities. Ramsar site no. 1570. Most recent RIS information: 2005.
Kabartal Wetland
Site number: 2,436 | Country: India | Administrative region: The wetland is situated in Begusarai district in the state of Bihar
Area: 2,620 ha | Coordinates: 25°37'05"N 86°08'22"E | Designation dates: 21-07-2020

Kabartal Wetland, also known as Kanwar Jheel, covers 2,620 hectares of the Indo-Gangetic plains in the northern Bihar State. The Site is one of 18 wetlands within an extensive floodplain complex; it floods during the monsoon season to a depth of 1.5 metres. This absorption of floodwaters is a vital service in Bihar State where 70% of the land is vulnerable to inundation. During the dry season, areas of marshland dry out and are used for agriculture. Significant biodiversity is present, with 165 plant species and 394 animal species recorded, including 221 bird species. The Wetland is an important stopover along the Central Asian Flyway, with 58 migratory waterbirds using it to rest and refuel. It is also a valuable site for fish biodiversity with over 50 species documented. Five critically endangered species inhabit the site, including three vultures – the red-headed vulture (Sarcogyps calvus), white-rumped vulture (Gyps bengalensis) and Indian vulture (Gyps indicus) – and two waterbirds, the sociable lapwing (Vanellus gregarius) and Baer's pochard (Aythya baeri). Major threats to the Site include water management activities such as drainage, water abstraction, damming and canalization.

Kanjli
Site number: 1,160 | Country: India | Administrative region: Punjab
Area: 183 ha | Coordinates: 31°25'N 75°22'E | Designation dates: 22-01-2002

Kanjli. 22/01/02.; Punjab; 183 ha; 31°25'N 075°22'E. A permanent stream, the Kali Bein, converted by construction of a small barrage in 1870 into a water storage area for irrigation purposes. The site fulfils Criteria 3 because of its importance in supporting a considerable diversity of aquatic, mesophytic, and terrestrial flora and fauna in the biogeographical region, and acts also as a key regulator of groundwater discharge and recharge with the seasons. By this means and by direct abstraction of water for irrigation by the local population, the site plays a crucial role in the agriculture which predominates on the surrounding fertile plain, with fewer pressures upon water supplies than elsewhere in the Punjab. The invasive water hyacinth is present and must be removed from time to time; increasing pollution levels, deforestation in the catchment area, and excessive grazing are seen as potential threats. The stream is considered to be the most significant in the state from the religious point of view, as it is associated with the first guru of the Sikhs, Shri Guru Nanak Dev Ji. The stream itself and surrounding marsh is under provincial ownership and surrounding areas privately owned. The site is a center for environmental tourism and picnicking. Ramsar site no. 1160. Most recent RIS information: 2001.

Keoladeo National Park
Site number: 230 | Country: India | Administrative region: Rajasthan
Area: 2,873 ha | Coordinates: 27°13'N 77°31'59"E | Designation dates: 01-10-1981

Keoladeo National Park. 01/10/81; Rajasthan; 2,873 ha; 27°13'N 077°32'E. Added to the Montreux Record, 4 July 1990. World Heritage Site; National Park; Bird Sanctuary. A complex of ten artificial, seasonal lagoons, varying in size, situated in a densely populated region. Vegetation is a mosaic of scrub and open grassland that provides habitat for breeding, wintering and staging migratory birds. Also supported are five species of ungulates, four species of cats, and two species of primates, as well as diverse plants, fish and reptiles. The canal provides water for agriculture and domestic consumption. Cattle and water buffalo graze on the site. A field research station exists. Placed on the Montreux Record in 1990 due to "water shortage and an unbalanced grazing regime". Additionally, the invasive growth of the grass Paspalum distichum has changed the ecological character of large areas of the site, reducing its suitability for certain waterbird species, notably the Siberian crane. Subject of Ramsar Advisory Missions in 1988 and 1990. Ramsar site no. 230.
Keshopur-Miani Community Reserve
Site number: 2,414  |  Country: India  |  Administrative region: Gurdaspur district of Punjab
Area: 343.9 ha  |  Coordinates: 32°05'34"N 75°23'23"E  |  Designation dates: 26-09-2019
View Site details in RSIS

The Keshopur-Miani Community Reserve is located in the State of Punjab. The Reserve is a mosaic of natural marshes, aquaculture ponds and agricultural wetlands maintained by the annual rainfall runoff. It is heavily human-influenced, and includes a series of managed fishponds and cultivated crops such as lotus and chestnut. This management helps support a variety of flora, with 344 species of plants recorded in the area. In this way, the Site is an example of wise use of a community-managed wetland, which provides food for people and supports local biodiversity. Threatened species present include the vulnerable common pochard (Aythya ferina) and the endangered spotted pond turtle (Geoclemys hamiltonii). The Department of Forests and Wildlife Preservation, Punjab, forms the management committee.

Khijadia Wildlife Sanctuary
Site number: 2,464  |  Country: India  |  Administrative region: Khijadia wildlife sanctuary falls within Jamnagar District of Gujarat State, India. Khijadia Wildlife Sanctuary located virtually between 22°31'27" N and 70°07'17"E.
Area: 511.7 ha  |  Coordinates: 22°30'52"N 70°08'45"E  |  Designation dates: 13-04-2021
View Site details in RSIS

This freshwater wetland near the coast of the Gulf of Kutch in Gujarat State was formed following the creation of a bund (dike) in 1920 to protect farmland from saltwater ingress. As one of the important waterbird habitats in North-West India, the Site provides breeding, feeding and roosting grounds for a wide range of resident aquatic and also land-based birds. It provides habitat for over 310 bird species, including 125 waterbirds; over 165,000 individual waterbirds have been counted. These include the endangered Pallas's fish-eagle (Haliaeetus leucoryphus) and Indian skimmer (Rynchops albicollis), and the vulnerable common pochard (Aythya ferina). The Site also regularly supports more than 1% of the south and south-west Asian population of Dalmatian pelican (Pelecanus crispus), more than 2% of greylag goose (Anser anser) and more than 20% of common crane (Grus grus). More than 180 plant species are present, including the critically endangered Indian bdellium-tree (Commiphora wightii). The Site contributes to the maintenance of hydrological regimes, erosion protection and nutrient cycling. It is used for recreation and tourism, and scientific and educational activities.

Kolleru Lake
Site number: 1,209  |  Country: India  |  Administrative region: Andhra Pradesh
Area: 90,100 ha  |  Coordinates: 16°37'N 81°12'E  |  Designation dates: 19-08-2002
View Site details in RSIS

Kolleru Lake. 19/08/02. Andhra Pradesh. 90,100 ha. 16°37'N 081°12'E. Wildlife Sanctuary. A natural eutrophic lake, situated between the two major river basins of the Godavari and the Krishna, fed by two seasonal rivers and a number of drains and channels, which functions as a natural flood balancing reservoir between the deltas of the two rivers. It provides habitat for a number of resident and migratory birds, including declining numbers of the vulnerable Grey Pelican (Pelecanus philippensis), and sustains both culture and capture fisheries, agriculture and related occupations of the people in the area. Damage and losses due to flooding in monsoon seasons and partial drying out during summers, the results of inadequate management planning and action, are seen as areas for improvement. WWF-India has been of great assistance in preparing the site's designation. Ramsar site no. 1209. Most recent RIS information: 2002.
Loktak Lake
Site number: 463  |  Country: India  |  Administrative region: Manipur
Area: 26,600 ha  |  Coordinates: 24°25'59"N 93°49'E  |  Designation dates: 23-03-1990
View Site details in RSIS

Loktak Lake. 23/03/90; Manipur; 26,600 ha; 24°26'N 093°49'E. Added to the Montreux Record, 16 June 1993. A large, but shrinking freshwater lake and associated swamplands supplied by several streams. Thick, floating mats of weeds covered with soil (phumids') are a characteristic feature. The lake is used extensively by local people as a source of water for irrigation and domestic use and is an important wintering and staging area for waterbirds, particularly ducks. It also plays an important role in flood control. Included on the Montreux Record in 1993 as a result of ecological problems such as deforestation in the catchment area, infestation of water hyacinth, and pollution. The construction of a dam for hydroelectric power generation and irrigation purposes has caused the local extinction of several native fish species. Ramsar site no. 463. Most recent RIS information: 1990.

Lonar Lake
Site number: 2,441  |  Country: India  |  Administrative region: Site lies in Buldhana district in the state of Maharashtra
Area: 427 ha  |  Coordinates: 19°58'33"N 76°30'30"E  |  Designation dates: 22-07-2020
View Site details in RSIS

This wetland on the Deccan Plateau is an endorheic or closed basin, almost circular in shape, formed by a meteorite impact onto the basalt bedrock. The Site includes the lake as well as escarpments, which form the crater walls, and forested zones. The lake is high in salinity and alkalinity, as the lack of an outflow leads to a concentration of minerals as the lake water evaporates. Specialized micro-organisms such as anaerobes, cyanobacteria and phytoplankton survive in this harsh chemical environment. Outside the lake, there is considerable diversity of plant and animal life, as springs which help feed the lake provide a source of fresh water. Inhabiting the Site are 160 species of birds including the vulnerable Asian woollyneck (Ciconia episcopus) and common pochard (Aythya ferina), 46 species of reptiles, and 12 species of mammals including the iconic grey wolf (Canis lupus). Factors which threaten the site include household sewage and urban wastewater, and unsustainable tourism.

Nalsarovar
Site number: 2,078  |  Country: India  |  Administrative region: Gujarat State
Area: 12,000 ha  |  Coordinates: 22°46'32"N 72°02'21"E  |  Designation dates: 24-09-2012
View Site details in RSIS

Nalsarovar Bird Sanctuary. 24/09/12; Gujarat; 12,000 ha; 22°46'33"N 072°02'21"E. Wildlife Sanctuary. A natural freshwater lake (a relict sea) that is the largest natural wetland in the Thar Desert Biogeographic Province and represents a dynamic environment with salinity and depth varying depending on rainfall. The area is home to 210 species of birds, with an average 174,128 individuals recorded there during the winter and 50,000 in the summer. It is an important stopover site within the Central Asia Flyway, with globally threatened species such as the critically endangered Sociable Lapwing (Vanellus gregarius) and the vulnerable Marbled Teal (Marmaronetta angustirostris) stopping over at the site during migration, while the vulnerable Sarus Crane (Grus antigone) takes refuge there during summer when other water bodies are dry. The wetland is also a lifeline for a satellite population of the endangered Indian Wild Ass (Equus hemionus khur) which uses this area in the dry season. Local communities heavily rely on the lake as it provides them with a source of drinking water and water for irrigation, as well as an important source of income from fishing for Catla fish (Catla Catla) and Rohu (Labeo rohita). An average of 75,000 tourists visit the wetland annually. Ramsar Site no. 2078. Most recent RIS information: 2012.
The Site is a mosaic of lakes, marshes and riparian forest on the Deccan Plateau. Construction of the Nandur Madhameshwar Weir at the confluence of the Godavari and Kadwa Rivers helped create a thriving wetland: originally designed to overcome water shortages in the surrounding area, the Site now also serves as a buffer against floodwaters and as a biodiversity hotspot. With 536 species recorded, its diverse habitats contrast with the surrounding semi-arid conditions caused by the rain shadow of the Western Ghats mountain range. The Site hosts some of India's most iconic species, such as the leopard and Indian sandalwood (Santalum album). It also provides sanctuary to critically endangered species including Deolali minnow (Parapsilorhynchus prateri), Indian vulture (Gyps indicus) and white-rumped vulture (Gyps bengalensis). Invasive species including common water hyacinth (Eichhornia crassipes) threaten the Site, along with the effects of urban development and water abstraction. The Office of the Conservator of Forest (Wildlife) manages the Site.

Located in the Shiwalik foothills of Punjab is the highly eco-sensitive Nangal Wildlife Sanctuary, which supports abundant flora and fauna including threatened species, such as the endangered Indian pangolin (Manis crassicaudata) and Egyptian vulture (Neophron percnopterus) and the vulnerable leopard (Panthera pardus). It occupies a human-made reservoir constructed as part of the Bhakra-Nangal Project in 1961. The site is of historic importance as the Indian and Chinese Prime Ministers formalized the “Five Principles of Peaceful Coexistence” there in 1954. More than half a million people downstream benefit from the reservoir as the flow of water is regulated, reducing the risks to both people and property from floods. The Department of Forests and Wildlife Preservation (Rupnagar Wildlife Division), Punjab is responsible for managing the Sanctuary.

A shallow marshland 45 kilometres from Lucknow in Uttar Pradesh. Monsoon rains feed this diverse wetland while the Sarda Canal supplies additional water. The Sanctuary supports recreation and tourism activities as well as local biodiversity. It is a haven for birds, with 25,000 waterbirds regularly recorded and 220 resident and migratory species documented. Among these are globally threatened species including the endangered Egyptian vulture (Neophron percnopterus) and Pallas's fish eagle (Haliaeetus leucoryphus) as well as the vulnerable lesser adjutant (Leptoptilos javanicus) and woolly-necked stork (Ciconia episcopus). Protection and afforestation measures have helped increase the overall diversity of wildlife, with golden jackal (Canis aureus) and jungle cat (Felis chaus) now present. The highly invasive common water hyacinth (Eichhornia crassipes) poses a threat, as does the removal of timber from the forests. State forest officers along with the Office of the Conservator of Forest (Wildlife) jointly manage the Sanctuary.
Parvati Arga Bird Sanctuary

Parvati Arga Bird Sanctuary is a permanent freshwater environment consisting of two oxbow lakes. These wetlands are characteristic of Uttar Pradesh and offer exceptional habitats for waterbirds, providing both roosting and breeding sites with over 100,000 birds documented in annual counts. The Sanctuary is a refuge for some of India's threatened vulture species: the critically endangered white-rumped vulture (*Gyps bengalensis*) and Indian vulture (*Gyps indicus*), and the endangered Egyptian vulture (*Neophron percnopterus*) have all been recorded. It is also critical in the maintenance of hydrological regimes, ensuring groundwater recharge and discharge. Meanwhile ancient temples around the lakes provide religious significance and encourage tourism. Invasive species such as the common water hyacinth (*Eichhornia crassipes*) along with the development of roads and railways present significant threats. The Uttar Pradesh Divisional Forest Officer and Chief Conservator of Forests along with Sanctuary Officers share management duties.

Point Calimere Wildlife and Bird Sanctuary

Point Calimere Wildlife and Bird Sanctuary. 19/08/02. Tamil Nadu. 38,500 ha. 10°19'N 079°38'E. Wildlife Sanctuary. A coastal area consisting of shallow waters, shores, and long sand bars, intertidal flats and intertidal forests, chiefly mangrove, and seasonal, often-saline lagoons, as well as human-made salt exploitation sites. Some 257 species of birds have been recorded, 119 of them waterbirds, including the vulnerable species Spoonbill Sandpiper (*Euryhorhynchus pygmaeus*) and Grey Pelican (*Pelecanus philippensis*) and some 30,000 Greater and Lesser Flamingos. The site serves as the breeding ground or nursery for many commercially important species of fish, as well as for prawns and crabs. Some 35,000 fishermen and agriculturalists support their families around the borders of the sanctuary. Illegal collection of firewood and forest produce such as fruits (gathered by lopping off tree branches), the spread of *Prosopis chilensis* (Chilean mesquite), increasingly brackish groundwater caused by expansion of the historical salt works, and decreasing inflow of freshwater are all seen as potential causes for concern. Visitors come to the site both for recreation and for pilgrimage, as it is associated with Lord Rama. Ramsar site no. 1210. Most recent RIS information: 2002.

Pong Dam Lake

Pong Dam Lake. 19/08/02. Himachal Pradesh. 15,662 ha. 32°01'N 076°05'E. Wildlife Sanctuary. A water storage reservoir created in 1975 on the Beas River in the low foothills of the Himalaya on the northern edge of the Indo-Gangetic plain. The RIS notes that "at a time when wetlands in northern India are getting reduced due to extensive drainage and reclamation, the avian habitats formed by the creation of the Pong Dam assume a great significance" - given the site's location on the trans-Himalayan flyway, more than 220 bird species have been identified, with 54 species of waterfowl. Hydrological values include monsoon-season flood prevention, both in the surroundings and downstream due to water regulation, groundwater recharge, silt trapping and prevention of soil erosion; electricity is generated for this and neighboring states, and irrigation water is being channeled to fertile areas of the Punjab and Rajasthan deserts. Low-yield subsistence fishing existed prior to impoundment, but since, a lucrative fishery has grown up, with 27 fish species and a yield increasing markedly each year - some 1800 fishermen now have direct employment and 1000 families benefit indirectly. A nature conservation education centre is found on the island of Ransar or Ramsar (sic). Recent management strategies have shifted away from law enforcement and use restrictions towards more participatory approaches and community awareness, and the site is well suited to "community-based ecotourism". Ramsar site no. 1211. Most recent RIS information: 2002.
Renuka Wetland
Site number: 1,571  |  Country: India  |  Administrative region: Himachal Pradesh State
Area: 20 ha  |  Coordinates: 31°37'N 77°27'E  |  Designation dates: 08-11-2005
View Site details in RSIS

Renuka Wetland. 08/11/05; Himachal Pradesh; 20 ha; 31°37'N 077°27'E. Wildlife Sanctuary, Reserve Forest. A natural wetland with freshwater springs and inland subterranean karst formations, fed by a small stream flowing from the lower Himalayan out to the Giri river. The lake is home to at least 443 species of fauna and 19 species of ichthyofauna representative of lacustrine ecosystems like Puntius, Labeo, Rasbora, Channa. Prominent vegetation ranges from dry deciduous like Shorea Robusta, Terminalia tomentosa, Dalbergia sissoo to hydrophytes. There are 103 species of birds of which 66 are residents, e.g. Crimson-breasted barbet, Mayna, Bulbul, Pheasants, Egrets, Herons, Mallards and Lapwing. Among ungulates Sambhar, Barking deer and Ghorals are also abundant in the area. The lake has high religious significance and is named after the mother of Hindu sage Parshuram, and is thus visited by thousands of pilgrims and tourists. Conservation measures so far include community awareness, and prevention of silt influx from eroded slopes and 50 ha. of massive plantation in the catchment. The site is managed by the Shimla Forest Department, Himachal Pradesh. Ramsar site no. 1571. Most recent RIS information: 2005.

Ropar
Site number: 1,161  |  Country: India  |  Administrative region: Punjab
Area: 1,365 ha  |  Coordinates: 31°01'N 76°30'E  |  Designation dates: 22-01-2002
View Site details in RSIS

Ropar. 22/01/02; Punjab; 1,365 ha; 31°01'N 076°30'E. National Wetland. A humanmade wetland of lake and river formed by the 1952 construction of a barrage for diversion of water from the Sutlej River for drinking and irrigation supplies. The site is an important breeding place for the nationally protected Smooth Indian Otter, Hog Deer, Sambar, and several reptiles, and the endangered Indian Pangolin (Manis crassicaudata) is thought to be present. Some 35 species of fish play an important role in the food chain, and about 150 species of local and migratory birds are supported. Local fisheries are economically significant, and wheat, rice, sugar cane, and sorghum are cultivated in the surrounding area. Deforested local hills leading to siltation, and increasing industrialization causing an inflow of pollutants, are potential threats, and invasive weeds are a further cause for concern. Nature lovers, birdwatchers, swimmers and boaters visit the site in considerable numbers. Ramsar site no. 1161.Most recent RIS information: 2001.

Rudrasagar Lake
Site number: 1,572  |  Country: India  |  Administrative region: West Tripura District
Area: 240 ha  |  Coordinates: 23°28'59"N 91°16'E  |  Designation dates: 08-11-2005
View Site details in RSIS

Rudrasagar Lake. 08/11/05; Tripura; 240 ha; 23°29'N 090°01'E. A lowland sedimentation reservoir in the northeast hills, fed by three perennial streams discharging to the River Gomti. The lake is abundant in commercially important freshwater fishes like Botia spp, Notopterus Chitala, Mystus spp., Ompok pabda, Labeo bata, and freshwater scampi, with annual production of 26 metric-tons, and an ideal habitat for IUCN Redlisted Three-striped Roof Turtle Kachuga dhongka. Owing to high rainfall (2500mm) and downstream topography, the wetland is regularly flooded with 4-5 times annual peak, assisting in groundwater recharge. Aquatic weeds are composed of rare marginal-floating-emergent-submerged weeds. Lands are owned by the state with perennial water areas leased out to the subsistent fishermen's cooperative, and surrounding seasonal waterbodies are cultivated for paddy. Main threats are increasing silt loads due to deforestation, expansion of agricultural land and intensive farming, and land conversion for population pressure. Vijaya Dashami, one of the most important Hindu festivals with various sports events, attracts at least 50,000 tourists and devotees every year. A management plan is underway by the MoEF-india. Ramsar site no. 1572. Most recent RIS information: 2005.
**Saman Bird Sanctuary**

Site number: 2,413 | Country: India | Administrative region: Saman Bird Sanctuary is located near village Saman in Karhal tehsil of Mainpuri district in the state of Uttar Pradesh.

Area: 526.3 ha | Coordinates: 27°00'56"N 79°10'36"E | Designation dates: 02-12-2019

The Saman Bird Sanctuary in the Mainpuri district of Uttar Pradesh is a seasonal oxbow lake on the Ganges floodplain. It is heavily reliant on the arrival of the south-westerly monsoon in July and August, which provides the vast majority of annual rainfall. The Sanctuary regularly provides refuge to over 50,000 waterbirds (187 bird species have been recorded) and is particularly important as a wintering site for many migrants including the greylag goose (*Anser anser*), with over 1% of the South Asian population present during winter. Vulnerable species including sarus crane (*Grus antigone*) and greater spotted eagle (*Aquila clanga*) are also found. Ecosystem services provided include supply of fresh water for agriculture, as well as recreation and nature-based tourism based around the huge diversity of birds. Settlement encroachment and salinization present threats. The Office of the Conservator of Forest (Wildlife) oversees the Site's management.

**Samaspur Bird Sanctuary**

Site number: 2,415 | Country: India | Administrative region: Raebareli district in state of Uttar Pradesh, India

Area: 799.4 ha | Coordinates: 25°59'44"N 81°23'19"E | Designation dates: 03-10-2019

The Samaspur Bird Sanctuary, in the Raebareli district of Uttar Pradesh, is a perennial lowland marsh typical of the Indo-Gangetic Plains. Its six connected lakes are heavily relevant on monsoon rains. Annual counts regularly find more than 75,000 birds present, with over 250 resident and migrant species documented. The Sanctuary harbours threatened species such as the endangered Egyptian vulture (*Neophron percnopterus*) and Pallas's fish eagle (*Haliaeetus leucoryphus*), and more than 1% of the South Asian population of the vulnerable common pochard (*Aythya ferina*). At least 46 freshwater fish species use the wetland, with some migrating in from nearby rivers during monsoon flood periods. The Site provides food products and agricultural fodder, as well as maintaining this biodiversity. However, invasive species threaten its ecological character, with over 40% of documented floral species being exotic. The Office of the Conservator of Forests (Wildlife) and State forest officers undertake joint management of the Sanctuary.

**Sambhar Lake**

Site number: 464 | Country: India | Administrative region: Rajasthan

Area: 24,000 ha | Coordinates: 27°00'N 75°00'E | Designation dates: 23-03-1990

Sambhar Lake. 23/03/90; Rajasthan; 24,000 ha; 27°00'N 075°00'E. A large saline lake fed by four streams set in a shallow wetland and subject to seasonal fluctuations. It is surrounded by sand flats and dry thorn scrub and fed by seasonal rivers and streams. The site is important for a variety of wintering waterbirds, including large numbers of flamingos. Human activities consist of salt production and livestock grazing. Ramsar site no. 464. Most recent RIS information: 1990.
Sandi Bird Sanctuary
Site number: 2,409   |   Country: India   |   Administrative region: The Sanctuary is located in the Bilgram tehsil of Hardoi district in state of Uttar Pradesh, India. It is just 1 Km from the Sandi town, 19 Km from city Hardoi and 129 Km from Lucknow, the state capital.
Area: 308.5 ha   |   Coordinates: 27°18'49"N 79°58'19"E   |   Designation dates: 26-09-2019
View Site details in RSIS

Sandi Bird Sanctuary is a freshwater marsh in the Hardoi district of Uttar Pradesh. The wetland is typical of the Indo-Gangetic plains and receives most of its water from monsoon rains. Rich in aquatic plants, the Site provides a productive habitat for waterfowl with over 40,000 individuals counted in 2018. It is home to over 1% of the South Asian populations of common teal (Anas crecca), red-crested pochard (Netta rufina) and ferruginous duck (Aythya nyroca), while the vulnerable sarus crane (Grus antigone) has a population of 200 individuals within the Sanctuary. These figures justify its designation as an Important Bird Area by BirdLife International. The wetland is a popular recreational and tourism destination and supports surrounding farmers as a source of livestock fodder. Drought presents a threat; the Sanctuary dried out leading to a subsequent collapse in waterbird populations from 2014 to 2015. The Office of the Conservator of Forests manages the Site in conjunction with local forest and wildlife officers.

Sarsai Nawar Jheel
Site number: 2,411   |   Country: India   |   Administrative region: Takha tehsil, Etawah District, Uttar Pradesh
Area: 161.3 ha   |   Coordinates: 26°58'08"N 79°15'02"E   |   Designation dates: 19-09-2019
View Site details in RSIS

Sarsai Nawar Jheel is a permanent marsh in the Etawah district of Uttar Pradesh. This typical wetland of the Indo-Gangetic floodplain is fed by precipitation run-off from the South West monsoon rains. It is an example of co-habitation of humans and wildlife: farming practices across most of the Site play important roles in sustaining the waterbird habitats. A particular beneficiary is the vulnerable sarus crane (Grus antigone), with a population of 400 individuals making up the largest flock in the region. The Site's name is derived from this large non-migratory crane. Other threatened species present include the critically endangered white-rumped vulture (Gyps bengalensis) and endangered woolly-necked stork (Ciconia episcopus). The wetland is also a site of spiritual and religious significance with the nearby Hajari Mahadev temple visited by thousands of pilgrims each year. Droughts along with drainage have the potential to threaten the Site's ecological character. It is recognized by Birdlife International as an Important Bird Area.

Sasthamkotta Lake
Site number: 1,212   |   Country: India   |   Administrative region: Kerala District
Area: 373 ha   |   Coordinates: 09°01'59"N 76°37'E   |   Designation dates: 19-08-2002
View Site details in RSIS

Sasthamkotta Lake. 19/08/02. Kerala. 373 ha. 09°02'N 076°37'E. The largest freshwater lake in Kerala state in the southwest of the country, spring-fed and the source of drinking water for half a million people in the Kollam district. Some 27 freshwater fish species are present. The water contains no common salts or other minerals and supports no water plants; a larva called "cavaborus" abounds and eliminates bacteria in the water, thus contributing to its exceptional purity. The ancient Sastha temple is an important pilgrimage centre. WWF-India has been of great assistance in preparing the site's designation. Ramsar site no. 1212. Most recent RIS information: 2002.
Sultanpur National Park
Site number: 2,457  |  Country: India  |  Administrative region: Gurugram, Haryana
Area: 142.5 ha  |  Coordinates: 28°27'54"N 76°53'31"E  |  Designation dates: 25-05-2021
View Site details in RSIS

This shallow lake at the core of the Sultanpur National Park is fed by the overflow from neighbouring canals and fields, and replenished by saline groundwater. The lake features seasonal aquatic vegetation and is dotted with artificial islands; the Park also includes open grasslands. In 2010, the Ministry of Environment, Forests and Climate Change declared the area within five kilometres of the Park as an eco-sensitive zone. The wetland harbours a rich plant and animal life: it supports more than 220 species of resident, winter migratory and local migratory waterbirds at critical stages of their life cycles. More than ten of these are globally threatened, including the critically endangered sociable lapwing (*Vanellus gregarius*), and the endangered Egyptian vulture (*Neophron percnopterus*), saker falcon (*Falco cherrug*), Pallas's fish eagle (*Haliaeetus leucoryphus*) and black-bellied tern (*Sterna acuticauda*). The Site regularly supports more than 7% of the biogeographic population of bar-headed goose (*Anser indicus*) and more than 8% of the biogeographic population of greylag goose (*Anser anser*). The ecosystem services offered by the Sultanpur National Park include nutrient cycling, recreation and tourism and scientific and educational activities.

Sundarban Wetland
Site number: 2,370  |  Country: India  |  Administrative region: The Headquaters of the Sundarban Tiger Reserve is located at Canning town, South 24 Parganas district and is connected with broad gauge railway line with Sealdah South suburban station, which is 46 kms from Canning.
Area: 423,000 ha  |  Coordinates: 21°46'29"N 88°42'51"E  |  Designation dates: 30-01-2019
View Site details in RSIS

Sundarban Wetland is located within the largest mangrove forest in the world, the Sundarbans, that encompasses hundreds of islands and a maze of rivers, rivulets and creeks, in the delta of the Rivers Ganges and Brahmaputra on the Bay of Bengal in India and Bangladesh. The Indian Sundarbans, covering the south-westernmost part of the delta, constitutes over 60% of the country's total mangrove forest area and includes 90% of Indian mangrove species. The mangrove forests protect the hinterland from storms, cyclones, tidal surges, and the seepage and intrusion of saltwater inland and into waterways. They serve as nurseries to shellfish and finfish and sustain the fisheries of the entire eastern coast. The Sundarban Tiger Reserve is situated within the Site and part of it has been declared a "critical tiger habitat" under national law and also a "Tiger Conservation Landscape" of global importance. The Sundarbans are the only mangrove habitat which supports a significant population of tigers, and they have unique aquatic hunting skills. The Site is also home to a large number of rare and globally threatened species such as the critically endangered northern river terrapin (*Batagur baska*), the endangered Irrawaddy dolphin (*Orcaella brevirostris*), and the vulnerable fishing cat (*Prionailurus viverrinus*). Two of the world's four horseshoe crab species, and eight of India's 12 species of kingfisher are also found here. The uniqueness of the habitat and its biodiversity, and the many tangible and intangible, local, regional and global services they provide, makes the Site's protection and management a conservation priority.
**Surinsar-Mansar Lakes**

Site number: 1,573 | Country: India | Administrative region: Jammu, Kashmir State
Area: 350 ha | Coordinates: 32°45'N 75°12'E | Designation dates: 08-11-2005

Surinsar-Mansar Lakes, 08/11/05; Jammu & Kashmir; 350 ha; 32°45'N 075°12'E. Wildlife Sanctuary, Hindu sacred site. Freshwater composite lake in semi-arid Panjab Plains, adjoining the Jhelum Basin with catchment of sandy conglomeratic soil, boulders and pebbles. Surinsar is rain-fed without permanent discharge, and Mansar is primarily fed by surface run-off and partially by mineralised water through paddy fields, with inflow increasing in rainy season. The lake supports CITES and IUCN Redlisted Lissemys punctata, Aspideretes gangeticus, and Mansariella lacustris. This composite lake is high in micro nutrients for which it is an attractive habitat, breeding and nursery ground for migratory waterfowls like Fulica atra, Gallinula chloropus, Podiceps nigricollis, Aythya fuligula, and various Anas species. The site is socially and culturally very important with many temples around owing to its mythical origin from the Mahabharahta period. Although the lakes support variety of fishes, fishing is discouraged for religious values. The main threats are increasing visitors, agricultural run-off, bathing and cremation rituals. Conservation is focused on awareness-raising. Ramsar site no.1573. Most recent RIS information: 2005.

**Sur Sarovar**

Site number: 2,440 | Country: India | Administrative region: The wetland is located on Delhi-Mathura highway (National Highway-2), in Agra district, Uttar Pradesh
Area: 431 ha | Coordinates: 27°15'06"N 77°50'24"E | Designation dates: 21-08-2020

Sur Sarovar, also known as Keetham Lake, is a human-made reservoir; originally created to supply water to the city of Agra in summer, the wetland soon became an important and rich ecosystem. The Site's patchwork of different habitat types provides refuge to resident and migratory birds, and more than 60 species of fish. Threatened species include the vulnerable greater spotted eagle (Clanga clanga), sarus crane (Grus antigone) and catfish Wallago attu. The Site is important for bird species which migrate on the Central Asian flyway, with over 30,000 waterbirds known to visit the reservoir annually. Over 1% of the South Asian regional population of the greylag goose (Anser anser) is present. Unsustainable tourism, invasive species, and household sewage and urban wastewater present significant threats to the Site.

**Thol Lake Wildlife Sanctuary**

Site number: 2,458 | Country: India | Administrative region: The area falls within the administrative jurisdiction of Mehsana district of Gujarat state, India between 23°15' to 23°30' N latitudes and 72°30' to 72°45' E longitudes.
Area: 699 ha | Coordinates: 23°08'29"N 72°24'39"E | Designation dates: 05-04-2021

This shallow reservoir dominated by open water areas was originally constructed for irrigation in 1912. In 1988, it was declared as a wildlife sanctuary to protect the birdlife found there: it is on the Central Asian Flyway and more than 320 bird species can be found, making up some 57% of all the bird species of Gujarat. More than 110 waterbird species have been recorded, about 43% of India's waterbird species, with almost 30% of those species being migratory waterbirds. More than 30 of the waterbirds are threatened, such as the critically endangered white-rumped vulture (Gyps bengalensis) and sociable lapwing (Vanellus gregarius), and the vulnerable sarus crane (Grus antigone), common pochard (Aythya ferina) and lesser white-fronted goose (Anser erythropus). This wetland regularly hosts more than 1% of the population of species including glossy ibis (Plegadis falcinellus). It is also essential during the dry seasons for a population of blackbuck (Antilope cervicapra) and other mammals in the surrounding area. The Lake provides water for drinking and irrigation and enables groundwater recharge, and is also used for recreation and tourism. The vegetation provides excellent thatching material and is also used as fodder for domestic animals.
**Tso Kar Wetland Complex**

Site number: 2,443  |  Country: India  |  Administrative region: Nyoma Block, Leh District, Union Territory of Ladakh.

Area: 9,577 ha  |  Coordinates: 33°17'53"N 78°00'42"E  |  Designation dates: 17-11-2020

View Site details in RSIS

This high-altitude wetland complex is found at more than 4,500 metres above sea level in the Changthang region of Ladakh. The complex includes two connected lakes, the freshwater Startsapuk Tso and the larger hypersaline Tso Kar; it presents a notable example of two such lakes existing in close proximity. The name Tso Kar refers to the white salt efflorescence on the margins of the lake caused by the evaporation of the saline waters. The local climate is arid, and glacial meltwater is the primary water source for the lakes. The lakes and in particular the presence of fresh water attract biodiversity in a biologically sparse region. Inhabiting the Site are numerous threatened species including the endangered saker falcon (*Falco cherrug*) and Asiatic wild dog or dhole (*Cuon alpinus laniger*), and the vulnerable snow leopard (*Panthera uncia*). The Site also acts as an important stopover ground for migratory birds along the Central Asian Flyway and is one of the most important breeding areas in India for the black-necked crane (*Grus nigricollis)*.

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**Tsomoriri**

Site number: 1,213  |  Country: India  |  Administrative region: Eastern Ladakh, Jammu & Kashmir

Area: 12,000 ha  |  Coordinates: 32°54'N 78°18'E  |  Designation dates: 19-08-2002

View Site details in RSIS

Tsomoriri. 19/08/02. Jammu & Kashmir. 12,000 ha. 32°54'N 078°18'E. Wetland Reserve. A freshwater to brackish lake lying at 4,595m above sea level, with wet meadows and borax-laden wetlands along the shores. The site is said to represent the only breeding ground outside of China for one of the most endangered cranes, the Black-necked crane (*Grus nigricollis*), and the only breeding ground for Bar-headed geese in India. The Great Tibetan Sheep or Argali (*Ovis ammon hodgsoni*) and Tibetan Wild Ass (*Equus kiang*) are endemic to the Tibetan plateau, of which the Changthang is the westernmost part. The barley fields at Korzok have been described as the highest cultivated land in the world. With no outflow, evaporation in the arid steppe conditions causes varying levels of salinity. Ancient trade routes and now major trekking routes pass the site. The 400-year-old Korzok monastery attracts many tourists, and the wetland is considered sacred by local Buddhist communities and the water is not used by them. The local community dedicated Tsomoriri as a WWF Sacred Gift for the Living Planet in recognition of WWF-India's project work there. The rapidly growing attraction of the recently opened area to western tourists (currently 2500 per summer) as an "unspoilt destination" with pristine high desert landscapes and lively cultural traditions brings great promise but also potential threats to the ecosystem. Ramsar site no. 1213. Most recent RIS information: 2002.

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**Upper Ganga River**

Site number: 1,574  |  Country: India  |  Administrative region: Uttar Pradesh

Area: 26,590 ha  |  Coordinates: 28°33'N 78°12'E  |  Designation dates: 08-11-2005

View Site details in RSIS

Upper Ganga River (Brijghat to Narora Stretch). 08/11/05; Uttar Pradesh; 26,590 ha; 28°33'N 078°12'E. A shallow river stretch of the great Ganges with intermittent small stretches of deep-water pools and reservoirs upstream from barrages. The river provides habitat for IUCN Red listed Ganges River Dolphin, Gharial, Crocodile, 6 species of turtles, otters, 82 species of fish and more than hundred species of birds. Major plant species, some of which have high medicinal values, include Dalbergia sissoo, Saraca indica, Eucalyptus globulus, Ficus bengalensis, Dendrocalamus strictus, Tectona grandis, Azadirachta indica and aquatic Eichhorina. This river stretch has high Hindu religious importance for thousands of pilgrims and is used for cremation and holy baths for spiritual purification. Major threats are sewage discharge, agricultural runoff, and intensive fishing. Conservation activities carried out are plantation to prevent bank erosion, training on organic farming, and lobbying to ban commercial fishing. Ramsar site no. 1574. Most recent RIS information: 2005.
**Vembanad-Kol Wetland**

Site number: 1,214 | Country: India | Administrative region: Kerala State
Area: 151,250 ha | Coordinates: 09°49'59"N 76°45'E | Designation dates: 19-08-2002

Vembanad-Kol Wetland. 19/08/02. Kerala. 151,250 ha. 09°50'N 076°45'E. The largest brackish, humid tropical wetland ecosystem on the southwest coast of India, fed by 10 rivers and typical of large estuarine systems on the western coast, renowned for its clams and supporting the third largest waterfowl population in India during the winter months. Over 90 species of resident birds and 50 species of migratory birds are found in the Kol area. Flood protection for thickly-populated coastal areas of three districts of Kerala is considered a major benefit, groundwater recharge helps to supply well water for the region, and the value of the system for the local transport of people and trade is considerable. Ramsar site no. 1214. Most recent RIS information: 2002.

**Wadhvana Wetland**

Site number: 2,454 | Country: India | Administrative region: The wetland is situated in the state of Gujarat. It is located in Dabhoi Tehsil (Taluka), Vadodara district at a distance of 45 km from Vadodara city and 15 km from Dabhoi town.
Area: 630 ha | Coordinates: 22°10'19"N 73°29'12"E | Designation dates: 05-04-2021

This reservoir was created in 1910 by the former Baroda State. It is located in a semi-arid agricultural landscape and it is surrounded by wheat and paddy fields and villages. The wetland is internationally important for its birdlife as it provides wintering ground to migratory waterbirds, including over 80 species that migrate on the Central Asian Flyway. They include some threatened or near-threatened species such as the endangered Pallas’s fish-eagle (*Haliaeetus leucoryphus*), the vulnerable common pochard (*Aythya ferina*), and the near-threatened Dalmatian pelican (*Pelecanus crispus*), grey-headed fish-eagle (*Icthyophaga ichthyaetus*) and ferruginous duck (*Aythya nyroca*). In addition the red-crested pochard (*Netta rufina*), a duck which is otherwise rare in Western India, is regularly recorded here during winter. Resident birds include the vulnerable river tern (*Sterna aurantia*) and sarus crane (*Grus antigone*) and the near-threatened black-necked stork (*Ephippiorhynchus asiaticus*). Almost 46,000 individual birds were recorded during a mid-winter waterbird census conducted in 2020. The Site provides a global example of how a wetland originally created for irrigation has come to serve as an important waterbird habitat and hub for ecotourism and nature education.

**Wular Lake**

Site number: 461 | Country: India | Administrative region: Jammu & Kashmir State
Area: 18,900 ha | Coordinates: 34°16'N 74°33'E | Designation dates: 23-03-1990

Wular Lake. 23/03/90; Jammu & Kashmir; 18,900 ha; 34°16'N 074°33'E. The largest freshwater lake in India with extensive marshes of emergent and floating vegetation, particularly water chestnut, that provide an important source of revenue for the State Government and fodder for domestic livestock. The lake supports an important fishing industry and is a valuable source of water for irrigation and domestic use. The area is important for wintering, staging and breeding birds. Human activities include rice cultivation and tree farming. Ramsar site no. 461. Most recent RIS information: 1990.