Information Sheet on Flyway Network Sites

The management body intending to nominate a site for inclusion in the East Asian - Australasian Flyway Site Network is requested to complete a Site Information Sheet. The Site Information Sheet will provide the basic information of the site and detail how the site meets the criteria for inclusion in the Flyway Site Network.

The Site Information Sheet has been divided into two sections. Part 1 (Section 1-14) seeks basic information on the site and it is essential that it be completed. Part 2 seeks additional information and is optional.

The Site Information Sheet is based on the Ramsar Information Sheet. If the site proposed for the Flyway Site Network is an existing Ramsar site then the documentation process can be simplified. In this case the National Government Partner need only send a copy of the existing sheets with additional details on Question 1 and 10 of the Flyway Site Information Sheet.

Once completed, the Site Information Sheet (and accompanying map(s)) should be submitted to the Flyway Partnership Secretariat. Compilers should provide an electronic (MS Word) copy of the Information Sheet and, where possible, digital copies of all maps.

Part 1: Essential Information

1. Name and contact details of the compiler of this form:

The full name, institution/agency, and address of the person(s) who compiled the SIS, together with any telephone and fax numbers and e-mail address.

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2. Date this sheet was completed:

The date on which the SIS was completed (or updated).

15 May 2011

3. Country:

The official (short) version of the country name.

Bangladesh
(The Peoples Republic of Bangladesh)

4. Name of the Flyway Network site:

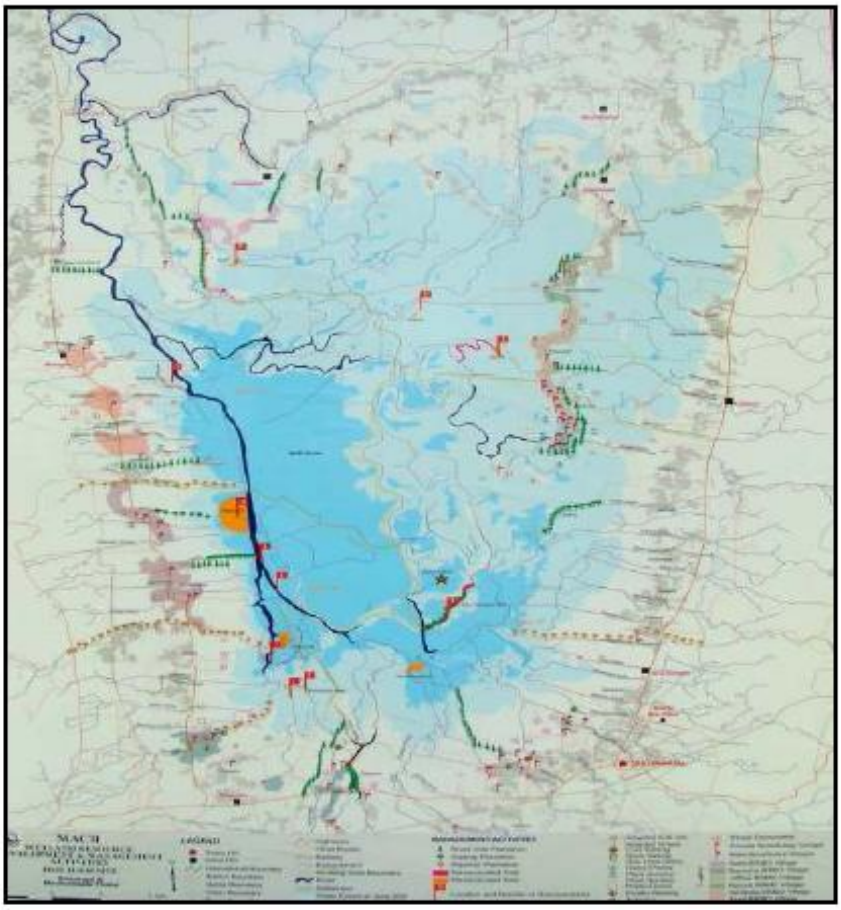
The precise name of the designated site in the national language and English. This name will be used precisely as given on the Site certificate. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Hail Haor (including Baikka Beel)

5. Map of site:

The most up-to-date available and suitable map of the wetland should be appended to the SIS (in hardcopy and, if possible, also in digital format). The map must clearly show the boundary of the site.

Map of Hail Haor



6. Geographical coordinates (latitude/longitude, in decimal degrees):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Latitude: 24.37

Longitude: 91.70

Latitude (DMS): 24° 22' 0 N

Longitude (DMS): 91° 42' 0 E

(Location modified: 27/1/1994, Maps & Location database updated: 27-02-2004)

7. Elevation: (in metres: average and/or maximum & minimum)

All water bodies are floodplain. They are the low-lying plain land. Average elevation is 4-5 meter from mean sea level.

8. Area:

The total area of the site, in hectares. If the areas of discrete site units are known, please also list each of these together with the names (or labels) used to identify and differentiate these units.

Hail Haor is a basin between hills that becomes a large single body of water which overall catchments area 60,000 ha, Wet Season haor area 12,490 ha, Dry Season water area 4,009 ha (March 2000), 400 ha (1999 dry season) and Adjacent floodplain 20,000+ ha. Out of total area, 100 ha has been declared as a Fish Sanctuary known as Baikka Beel.

9. General overview of the site:

A brief summary of the site (limited to not more than two sentences), mentioning principal physical and ecological functions, and its importance for migratory waterbirds.

Hail Haor comprises of open water with emergent vegetation (mostly lotus), and a fringe of native swamp forest planted about 10 years ago. Originally it was protected to conserve and restore fish and it also supports about 90 species of fish, but populations of wintering waterbirds has increased after the declaration of Fish Sanctuary. So far 141 bird species have been recorded within the sanctuary.

10. Justification of Flyway Site Network criteria:

Please provide waterbird count information that demonstrates that the site meets the criteria of the Flyway Site Network (Annex 1). That is:

- it regularly supports > 20 000 migratory waterbirds; or,
- it regularly supports > 1 % of the individuals in a population of one species or subspecies of migratory waterbird; or,
- it supports appreciable numbers of an endangered or vulnerable population of migratory waterbird
- it is a “staging site” supporting > 5 000 waterbirds, or > 0.25% of a population stage at the site.

A listing of the populations of migratory waterbirds covered by the East Asian – Australasian Flyway Partnership and the 1% thresholds is attached (Annex 3).

The “staging site” criterion is particularly difficult to apply and application of this should be discussed with the Secretariat. Also note that some species have several populations that are very difficult to distinguish in the field.

141 bird species have been recorded in the sanctuary. Up to 9 wintering Pallas’s Fish Eagles, large flocks of ducks including up to 4,500 Fulvous Whistling Duck (*Dendrocygna bicolor*) occur in winter,

Greater Spotted Eagle is regular, and good numbers and diversity of shorebirds, marshland warblers and other birds occur. This is the only substantial community managed wetland sanctuary in the country.

A6

Hail Haor regularly supports > 1 % of the individuals in populations of three species (subspecies) of migratory waterbirds.

Species	EAAF population	1% of EAAF population	Peak count	Year
Fulvous Whistling Duck (*Dendrocygna bicolor*)	50,000	500	4,500	(undated)
Eastern Great Egret* (*Ardea modesta*)	10,000-100,000	100	1,000	1991
Ruff* (*Philomachus pugnax*)	25,000-100,000	250	1,286	1993

*Source: Li et al. 2009. Status of waterbirds in Asia - results of the Asian Waterbird Census: 1987-2007. Wetland International.

11. Wetland Types:

List the wetland types present (see Annex 2). List the wetland types in order of their area in the Flyway Network site, starting with the wetland type with the largest area.

O, P, Xf

12. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Ministry of Agriculture/Dept. of Environment, etc.

Hail Haor: Srimangal upazilla, Moulovibazar district.

13. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

All wetlands are government property controlled by Ministry of Land. On behalf of the Ministry of Land, Upazilla & District Land administration looks after of these water bodies. Ministry of Fisheries & Department of Environment are also included in the management of the water bodies as maximum. Haors are included under ECAs (Ecologically Critical Areas). The Bangladesh Haor

Development Board under Ministry of Water Resources is responsible for water management and water control infrastructure.

Baikka Beel of Hail haor is a permanent fish Sanctuary. It is managed by District Land Administration, Moulovibazar + Department of Fisheries (DoF) + Participation of local communities (RMO) + Earlier USAID aided MACH project worked and at present IPAC project is working there. Forest Department is responsible for Wildlife Conservation.

14. Bibliographical references:

A list of key technical references relevant to the wetland, including management plans, major scientific reports, and bibliographies, if such exist. Please list any functional/active Web site addresses dedicated to the site or which prominently feature the site, and include the date that the Web site was most recently updated. When a large body of published material is available about the site, only the most important references need be cited, with priority being given to recent literature containing extensive bibliographies.

1. **Site-Level Field Appraisal for Protected Area Co-Management: Hail Haor by Amal Kumar Promanik for International Resources Group (IRG), IPAC project**
2. **http://www.traveljournals.net/explore/bangladesh/map/m3778359/hail_haor.html**
3. **www.nishorga.org**

Part 2 – Optional

15. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Hail Haor a large 3000-12,000 ha wetland and Baikka Beel fish sanctuary is a part of the large haor complex which is 100 ha. The wetland is located in seasonally extending from 3 in north-east Bangladesh (Sreemangal sub-district).

16. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Kushiara river of Sylhet district, Bangladesh

17. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

It is used for local Navigation by the neighbouring people.

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Flyway Network site, and the ecosystem services of the site and the benefits derived from them.

Baikka Beel comprises of open water with emergent vegetation (mostly lotus), and a fringe of native swamp forest planted in about 10 years ago.

19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the SIS.*(Please add here the species which do not comes under sec no 14)

Baikka Beel comprises of open water with emergent vegetation (mostly lotus), and a fringe of native swamp forest planted in about 10 years ago.

20. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 10. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the SIS.*(Please add here the species which do not comes under sec no 14)

Mammals are few but include the endangered Fishing Cat.

21. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

Describe this importance under one or more of the following categories:

i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

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

iv) sites where 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:

The aim of the sanctuary is to protect and restore aquatic biodiversity (particularly fish and birds) in Hail Haor. A secondary aim is through the visitor facilities to enhance enjoyment of the site and understanding of nature, the value of wetlands and need for their conservation. This is the only such facility in the country and this is the only substantial community managed wetland sanctuary in the country.

22. Land tenure/ownership:

a) within the Flyway Network site:

All the wetlands are owned by government of Bangladesh, managed by upazilla and District Land Administration on behalf of Ministry of Land.

b) in the surrounding area:

All the wetlands are owned by Ministry of Land, Bangladesh. Out side haor area, there exists private land.

23. Current land (including water) use:

a) within the Flyway Network site:

It is a permanent fish sanctuary and it is protected to conserve and restore fish. It is managed by the participation of local people under an organization named Borogangina Resource Management Organization (RMO) with the financial support of Endowment fund established by MACH (Management of Aquatic Ecosystems through Community Husbandry) an earlier USAID funded project, visitor fees, grants from MACH project. Currently USAID funded another project namely IPAC is working there.

b) in the surroundings/catchment:

24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Flyway Network site:

b) in the surrounding area:

25. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Flyway Network site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ❑; Ib ❑; II ❑; III ❑; IV ❑; V ❑; VI ❑

c) Does an officially approved management plan exist; and is it being implemented?:

d) Describe any other current management practices:

A USAID project named MACH implemented for 10 years in the Hail Haor and many conservation measures had been taken and implemented that time. After the completion of MACH, another USAID supported project named IPAC is operating in the Hail Haor including Baikka Beel with the adoption of co-management approach. This beel is a Permanent Wetland Sanctuary as declared by the government of Bangladesh.

26. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

27. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

28. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

On going project in the haor basin is communicating and educating people dependent on the natural resources of the haor as well as creating mass awareness to conserve the haor resources.

29. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Due to its scenic beauty and nature, it attracts large number of tourists to visit Baikka Beel every year particularly in the winter season. The beel is very much nearer to Srimangal, Moulovibazar and well communicated both by bus and train.

Annex 1: Criteria for the inclusion of sites in the Flyway Site Network (from the Partnership Text)

To be considered for inclusion in the Flyway Site Network, this Partnership adopts the following criteria:

a. Convention on Wetlands (Ramsar, Iran, 1971) criteria for internationally important sites for migratory waterbirds. That is:

   Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

   Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

   Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

b. The staging criteria as applied under the Asia - Pacific Migratory Waterbird Conservation Strategy. That is:

   i. A staging site should be considered internationally important if it regularly supports 0.25% of individuals in a population of one species or subspecies of waterbirds on migration.

   ii. A staging site should be considered internationally important if it regularly supports 5,000 or more waterbirds at one time during migration.

c. Under exceptional circumstances a site can be nominated if it supports migratory waterbirds at a level or stage of their life cycle important to the maintenance of flyway populations. Justification of such nominations will be considered by the Partnership on a case by case basis.

Annex 2: Ramsar Classification System for Wetland Type

The codes are based upon the Ramsar Classification System for Wetland Type as approved by Recommendation 4.7 and amended by Resolutions VI.5 and VII.11 of the Conference of the Contracting Parties. The categories listed herein are intended to provide only a very broad framework to aid rapid identification of the main wetland habitats represented at each site.

To assist in identification of the correct Wetland Types to list in section 19 of the RIS, the Secretariat has provided below tabulations for Marine/Coastal Wetlands and Inland Wetlands of some of the characteristics of each Wetland Type.

Marine/Coastal Wetlands

A -- **Permanent shallow marine waters** in most cases less than six metres deep at low tide; includes sea bays and straits.
B -- **Marine subtidal aquatic beds**; includes kelp beds, sea-grass beds, tropical marine meadows.
C -- **Coral reefs**.
D -- **Rocky marine shores**; includes rocky offshore islands, sea cliffs.
E -- **Sand, shingle or pebble shores**; includes sand bars, spits and sandy islets; includes dune systems and humid dune slacks.
F -- **Estuarine waters**; permanent water of estuaries and estuarine systems of deltas.
G -- **Intertidal mud, sand or salt flats**.
H -- **Intertidal marshes**; includes salt marshes, salt meadows, saltings, raised salt marshes; includes tidal brackish and freshwater marshes.
I -- **Intertidal forested wetlands**; includes mangrove swamps, nipah swamps and tidal freshwater swamp forests.
J -- **Coastal brackish/saline lagoons**; brackish to saline lagoons with at least one relatively narrow connection to the sea.
K -- **Coastal freshwater lagoons**; includes freshwater delta lagoons.
Zk(a) – **Karst and other subterranean hydrological systems**, marine/coastal

Inland Wetlands

L -- **Permanent inland deltas**.
M -- **Permanent rivers/streams/creeks**; includes waterfalls.
N -- **Seasonal/intermittent/irregular rivers/streams/creeks**.
O -- **Permanent freshwater lakes** (over 8 ha); includes large oxbow lakes.
P -- **Seasonal/intermittent freshwater lakes** (over 8 ha); includes floodplain lakes.
Q -- **Permanent saline/brackish/alkaline lakes**.
R -- **Seasonal/intermittent saline/brackish/alkaline lakes and flats**.

Sp -- **Permanent saline/brackish/alkaline marshes/pools**.
Ss -- **Seasonal/intermittent saline/brackish/alkaline marshes/pools**.
Tp -- **Permanent freshwater marshes/pools**; ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season.
Ts -- **Seasonal/intermittent freshwater marshes/pools on inorganic soils**; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.
U -- **Non-forested peatlands**; includes shrub or open bogs, swamps, fens.
Va -- **Alpine wetlands**; includes alpine meadows, temporary waters from snowmelt.
Vt -- **Tundra wetlands**; includes tundra pools, temporary waters from snowmelt.
W -- **Shrub-dominated wetlands**; shrub swamps, shrub-dominated freshwater marshes, shrub carr, alder thicket on inorganic soils.
Xf -- **Freshwater, tree-dominated wetlands**; includes freshwater swamp forests, seasonally flooded forests, wooded swamps on inorganic soils.
Xp -- **Forested peatlands**; peatswamp forests.
Y -- **Freshwater springs; oases**.
Zg -- **Geothermal wetlands**
Zk(b) – **Karst and other subterranean hydrological systems**, inland

Note: "**floodplain**" is a broad term used to refer to one or more wetland types, which may include examples from the R, Ss, Ts, W, Xf, Xp, or other wetland types. Some examples of floodplain wetlands are seasonally inundated grassland (including natural wet meadows), shrublands, woodlands and forests. Floodplain wetlands are not listed as a specific wetland type herein.

Human-made wetlands

1 -- **Aquaculture** (e.g., fish/shrimp) **ponds**
2 -- **Ponds**; includes farm ponds, stock ponds, small tanks; (generally below 8 ha).
3 -- **Irrigated land**; includes irrigation channels and rice fields.
4 -- **Seasonally flooded agricultural land** (including intensively managed or grazed wet meadow or pasture).
5 -- **Salt exploitation sites**; salt pans, salines, etc.
6 -- **Water storage areas**; reservoirs/barrages/dams/impoundments (generally over 8 ha).
7 -- **Excavations**; gravel/brick/clay pits; borrow pits, mining pools.
8 -- **Wastewater treatment areas**; sewage farms, settling ponds, oxidation basins, etc.
9 -- **Canals and drainage channels, ditches.**
Zk(c) -- **Karst and other subterranean hydrological systems**, human-made