

Information Sheet on EAA Flyway Network Sites (SIS) – 2017 version

Available for download from <http://www.eaaflyway.net/about/the-flyway/flyway-site-network/>

Categories approved by Second Meeting of the Partners of the East Asian-Australasian Flyway Partnership in Beijing, China 13-14 November 2007 - Report (Minutes) Agenda Item 3.13

Notes for compilers:

1. 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. When there is a new nomination or an SIS update, the following sections with an asterisk (*), from Questions 1-14 and Question 30, must be filled or updated at least so that it can justify the international importance of the habitat for migratory waterbirds.
2. 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.
3. 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 versions (e.g. shapefile) of all maps.

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

Full name: Mr. Tadaaki, Kato

EAAF SITE CODE FOR OFFICE USE ONLY:

Institution/agency: Agricultural Development Section, Osaki City

Address: 1-1 Nanokamachi, Furukawa, Osaki City, Miyagi Prefecture, 989-6188, JAPAN

E	A	A	F	0	9	8
---	---	---	---	---	---	---

Telephone: 0229-23-7090

Fax numbers: 0229-23-7578

E-mail address: nourin@city.osaki.miyagi.jp

2. Date this sheet was completed*:

DD/MM/YYYY

xx/xx/2009

3. Country*:

Japan

4. Name of the Flyway Network site*:

Accepted English transcription of the Site's name.

Kejo-numa

5. Map of site*:

The most up-to-date available and suitable map of the wetland should be appended to the SIS (only in digital format and shape file). The map must clearly show the boundary of the site. Please refer to the "Digitising Site Boundaries in Google Earth" file linked [here](#).

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.

38°37'N, 140°57'E (38.61667, 140.95000)

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

Minimum level: 23.4m

Maximum level: 30.5m

Full water level: 25.9m

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.

34 ha

9. General overview of the site*:

A brief (two sentences) summary of the site, mentioning principal physical and ecological functions, and its importance for migratory waterbirds.

The current Kejo-numa is a dammed lake completed in 1995 that serves for flood control and irrigation.

It is based on a natural lake that was embanked in c. 1690 as a small reservoir. Only rain water and spring water from the surrounding hills flow into the lake, except water transmission for flood

control. Common carps (*Cyprinus carpio*), Crucians (*Carassius cuvieri*), Largemouth bass (*Micropterus salmoides*) and Bluegills (*Lepomis macrochirus*) have been introduced in the lake. The maximum depth of the lake is less than 4 m, and various water plants such as lotus (*Nelumbo nucifera*) and Manchurian wild rice (*Zizania latifolis*) flourish in the whole area. About ten thousands birds such as >3,000 Greater White-fronted Goose *Anser albifrons* and >2,000 Thick-billed Bean Goose *Anser fabalis serrirostris* roost in winter, making this lake imperative for these species.

10. Justification of Flyway Site Network criteria*:

Please provide waterbird count information (with year of latest count) 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.

a2. Waterbirds that are listed in the IUCN Red List of Threatened Wildlife in Japan inhabit Kejo-numa,

Species	IUCN status ¹	Japan Red List ²	Species Conservation Law ³
Birds			
Bean goose (<i>Anser fabalis serrirostris</i>)	LC	VU	
Canada goose (<i>Branta canadensis leucopareia</i>)	LC	CR	Yes
Brent goose (<i>Branta bernicla orientalis</i>)	LC	VU	
Baikal teal (<i>Anas formosa</i>)	VU	VU	

¹ = IUCN Red List of Threatened Species

² = Red List of Threatened Wildlife in Japan. Ministry of the Environment (2007)

³ = Designated under the Law for Conservation of Endangered Species of Wild Fauna and Flora (Species Conservation Law)

(Abbreviations: CR = Critically endangered; EN = Endangered; VU = Vulnerable; Yes = noted as a Domestic Endangered Species)

a6. Over 5,000 White-fronted Geese (*Anser albifrons*) and over 1,000 Thick-billed Bean Geese (*Anser fabalis serrirostris*) overwinter in Kejo-numa, both of them exceeding 1% of the respective regional populations.

Species	1% Standard of the Population		Census Survey				
	World	Flyway	2005	2006	2007	2008	2009
White-fronted Goose (<i>Anser albifrons</i>)	1,800	1,500	5,877	9,985	8,407	11,558	10,858
Thick-billed Bean Goose (<i>Anser fabalis serrirostris</i>)	700	700	2,040	2,711	2,788	2,970	1,188

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.

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar “Classification System for Wetland Type” present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts • U • Va •
Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

6, O

12. Jurisdiction*:

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

[territorial]

Ministry of Land, Infrastructure, Transport and Tourism

[functional]

Ministry of the Environment (National Wildlife Protection Area)

Miyagi Prefecture

Agency for Cultural Affairs (national historical site)

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 and the title and/or name and email address/phone number of the person or persons in this office with direct responsibility for managing the wetland.

Tohoku Regional Environmental Office, Ministry of the Environment

3-2-23 Honmachi, Aoba-ku, Sendai City, Miyagi Prefecture, 980-0014, Japan

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 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.

Wetlands International. (2006). *Waterbird Population Estimates – Fourth Edition*

Ministry of the Environment. (2004). *Designation Plan of Kejo-numa National Wildlife Protection Area and Special Protection Area.*

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.

Geology: Peneplain valley consists of gravel layer of the Pleistocene epoch. The surrounding hills consist of layers formed by crustal alteration, volcanic activity and deposition of vegetation in the Pliocene epoch.

Geographical features: 34ha, shallow shelving bottom, depth is 4m or less. North, east and west sides of the lake are surrounded by hills lower than 100m, and there are rice paddies in the south.

Origin: Embanked natural lake

Hydrology: Kejo-numa belongs to Eai river system which flows into Kyu-Kitakami River which is a tributary of Kitakami River that flows through Sendai Plain. The inflow is limited to rain water and spring water from the surrounding hills, except for water transmitted

from Tajiri River for flood control. The outflow is used to irrigate 162.9 ha of rice paddies in the downstream, before merging into Tajiri River and then Eai River.

Soil type: Sand, gravel, clay, and silt

Water quality: Transparency over 30cm, PH7.0, no smell and no impurity.

Water depth: Normal depth is less than 4m. Maximum depth in dam operation is about 10m.

Water permanence: permanent

Fluctuations in water level: 23.4m-25.9m (from sea-level) for irrigation, 25.9m-30.5m for flood adjustment. The elevation of the bottom is 22m.

Downstream area: 183 ha

General climate: Class Cfa (Köppen classification). The annual rainfall is 1200mm. The annual mean temperature is 11 degrees. The average temperature of the coldest month at the closest observation point in Osaki City is -0.4 degrees Celsius. It rarely freezes completely even in the coldest months of the year.

16. Physical features of the catchment area:

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

Surface area: 183 ha

General geology and geomorphological features: Peneplain valley consists of gravel layer of the Pleistocene epoch.

General soil type: Sandstone, tuff, shale, and lignite

Climate: Class Cfa (Köppen classification). The annual rainfall is 1200mm. The annual mean temperature is 11 degrees.

17. Hydrological values:

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

Irrigation for rice field

Flood control

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.

The whole area of Kejo-numa is a habitat of various aquatic plants, birds and dragonflies. In summer, the whole surface area is covered with lotus (*Nelumbo nucifera*) or Water chestnut (*Trapa japonica*). Dragonfly species such as *Rhyothemis fuliginosa* or *Cercion plagiosum* breed on the

waterfront. Migratory birds such as white-fronted geese (*Anser albifrons*) and a subspecies of the bean goose (*Anser fabalis serrastris*) fly over to pass the winter at Kejo-numa.

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 come under sec no 14)

The below species, listed as NT or lower risk on Japan Red List (2007), are also found at Kejo-numa.

Species	Japan Red List ¹
Vascular Plants(28 species including the following)	
“Denjisou” (<i>Marsilea quadrifolia</i>)	VU
Brittle waternymph (<i>Najas minor</i>)	EN
“Tonetentsuki” (<i>Fimbristylis stauntonii</i> var. <i>Tonensis</i>)	VU
“Kinran” (<i>Cephalanthera falcate</i>)	VU
“Okinagusa” (<i>Pulsatilla cernua</i>)	VU
“Hirohano kawarasaiko” (<i>Potentilla niponica</i>)	VU
“Himebishi” (<i>Trapa incisa</i>)	VU
“Inu senburi” (<i>Swertia tosaensis</i>)	VU
“Marubano sawa tougarashi” (<i>Deinostema adenocaulum</i>)	VU
“Ooabunome” (<i>Gratiola japonica</i>)	VU
Balloon flower (<i>Platycodon grandiflorum</i>)	VU
“Akino hahakogusa” (<i>Gnaphalium hypoleucum</i>)	VU
“Onamomi” (<i>Xanthium strumarium</i>)	VU

¹ = Red List of Threatened Wildlife in Japan. Ministry of the Environment.

(Abbreviations: EN = Endangered; VU = Vulnerable)

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 come under sec no 14)

The below species, listed in the Japan Red List (2006), are also found at Kejo-numa.

Species	Japan Red List ²
Birds (19 species including the following)	
White-tailed Eagle (<i>Haliaeetus albicilla</i>)	EN
Eastern Marsh Harrier (<i>Circus spilonotus</i>)	EN
Steller’s sea eagle (<i>Haliaeetus pelagicus</i>)	VU

<i>pelagicus</i>)	
Peregrine falcon (<i>Falco peregrinus japonensis</i>)	VU
Bean goose (<i>Anser fabalis serrirostris</i>)	VU
Canada goose (<i>Branta canadensis leucopareia</i>)	CR
Brent goose (<i>Branta bernicla orientalis</i>)	VU
Baikal teal (<i>Anas formosa</i>)	VU
In addition to the above 10 others	
Insects	
“Oosesuji itotombo” (<i>Cercion plagiosum</i>)	CR+EN
“Ooki tombo” (<i>Sympetrum uniforme</i>)	CR+EN

¹ = Red List of Threatened Wildlife in Japan. Ministry of the Environment.

(Abbreviations: CR = Critically endangered; EN = Endangered; VU = Vulnerable)

21. Social, economic and cultural values:

a) Describe if the site has any general social, economic 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:

‘Ruin of Miyazawa’ is designated as a national historical site spreading from south-western part of Kejo-numa to the hilly districts. This ruin is a fort made around 750 to 1,000 A.D., which is presumed to have been a military or trading hub between Yamato dynasty and the other tribes. Because of beautiful natural view, the lakeside park, wild plants garden and wild bird observation road are maintained for relaxation and recreation for the citizens.

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? (Double-click the checkbox to check and choose “Checked” under “Default Value” from “Check Box Form Field Options” window)

If yes, tick the box and 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:

22. Land tenure/ownership:

a) Within the Flyway Network site:

a) within the Flyway Network site:

Kejo-numa's public-owned water surface is managed by Miyagi Prefecture.

b) in the surrounding area:

Mostly owned by the nation, Miyagi Prefecture and Osaki City, and partly private-owned.

23. Current land (including water) use:

a) Within the Flyway Network site:

Kejo-numa is used for flood control and irrigation. Water is provided to the paddy fields. It is selected as one of 1,000 monitoring sites in the "Monitoring Sites 1000" project by the Ministry of the Environment.

b) In the surroundings/catchment:

The surrounding hills are used for cedar afforestation and as other woods. Kejo-numa Ancient Village Park, Kejo-numa Citizens' Picnic Area Park and Tohoku Expressway Service Area could be found. The water of Kejo-numa is used to irrigate 162.9 ha of rice paddies in the downstream.

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:

Many of the submerged and floating-leaved plants died in the raised water level caused by the test of the dam conducted between 1993 and 1994.

The population of native fish has been decreasing after the dam construction due to released Largemouth Bass (*Micropterus salmoides*) and Bluegill (*Lepomis macrochirus*).

The aquatic plants have been decreasing due to the increasing number of swans.

b) In the surrounding area:

None

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.

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.

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.

Ramsar site: 34ha: from October 2008

Special Protection Area of National Wildlife Protection Area: 34 ha (Wildlife Protection and Appropriate Hunting Law)

Capture of wildlife (birds and mammals) is in principle prohibited in the area. It is required to obtain permissions from the Minister of the Environment when installing artificial structures, reclaiming the water body or logging.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate, see Annex 3):

Ia ; Ib ; II ; III ; IV ; V ; VI ; N/A

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

If yes, is it being implemented?: If no, is one being planned?

A plan is formulated with consultation among relevant national agencies, local governments and stakeholders, for the management of the Special Protection Area of National Wildlife Protection Area

d) Describe any other current management practices:

Local communities are engaged in cleanup activities on surrounding roads. A new artificial pond was created to transplant and protect the plants which were at risk of submerging from the dam construction.

26. Conservation measures proposed but not yet implemented:

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

Since the condition of the transplanted plants have been poor after the dam construction, the following plans were suggested:

- Setting up 10 new artificial ponds around the lake for transplant.
- Restoration of rare plants using the seed bank.

27. Current scientific research and facilities:

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

Miyagi Prefecture is conducting Anatidae surveys three times a year (The Miyagi Prefectural nature conservation section, 3-8-1 Honmachi, Aoba-ku, Sendai City, Miyagi 980-8570, Japan).

Dam Management Office (Kejo-numa Sightseeing Museum: 2-2 Tozawa, Furukawa-Ono, Osaki City)

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.

There are some promenades in the surrounding hills.

29. Current recreation and tourism:

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

Kejo-numa Ancient Village Park, Kejo-numa Citizens' Picnic Area Park and Tohoku Expressway Service Area are utilizing the views of Kejo-numa.

The water surface is used for bass and crucian fishing.

30. Threats*:

Which of the following threats is present historically – when the threat stopped but the effects are still there (H), currently (C) or potentially (P)?

	Historically	Currently	Potentially
Residential and commercial development			
housing and urban areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
commercial and industrial areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tourism and recreation areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agriculture and aquaculture			
annual and perennial non-timber crops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wood and pulp plantations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
livestock farming and ranching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
marine and freshwater aquaculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Energy production and mining			
oil and gas drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
mining and quarrying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
renewable energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation and service corridors			
roads and railroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
utility and service lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
shipping lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Information Sheet on EAA Flyway Network Sites

flight paths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological resource use			
hunting and collecting terrestrial animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gathering terrestrial plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
logging and wood harvesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
fishing and harvesting aquatic resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human intrusions and disturbance			
recreational activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
war, civil unrest and military exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
work and other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural system modifications			
fire and fire suppression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
dams and water management/use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other ecosystem modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive and other problematic species and genes			
invasive non-native/alien species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
problematic native species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
introduced genetic material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pollution			
household sewage and urban waste water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
industrial and military effluents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
agricultural and forestry effluents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
garbage and solid waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
air-borne pollutants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
excess energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geological events			
volcanoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
earthquakes/tsunamis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
avalanches/landslides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change and severe weather			

Information Sheet on EAA Flyway Network Sites

habitat shifting and alteration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
droughts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
temperature extremes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
storms and flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please write here any additional threats and comments/queries you have on the threats.

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**

Annex 3: IUCN Protected Areas Categories System

IUCN protected area management categories classify protected areas according to their management objectives. The categories are recognised by international bodies such as the United Nations and by many national governments as the global standard for defining and recording protected areas and as such are increasingly being incorporated into government legislation.

Ia Strict Nature Reserve

Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values.

Ib Wilderness Area

Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.

II National Park

Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible, spiritual, scientific, educational, recreational, and visitor opportunities.

III Natural Monument or Feature

Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.

IV Habitat/Species Management Area

Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many Category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.

V Protected Landscape/ Seascape

A protected area where the interaction of people and nature over time has produced an area of distinct character with significant, ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

VI Protected area with sustainable use of natural resources

Information Sheet on EAA Flyway Network Sites

Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems.