Guidance for the completion of FNS Site Information Sheet (SIS) v2025 Fields

General Guidance

1. Nomination and designation of Flyway Network Sites (FNS) is a key and flagship part of EAAFP implementation, and makes a major contribution to the Partnership's Vision, that "*Migratory waterbirds and their habitats in the East Asian – Australasian Flyway are recognised and conserved for the benefit of people and biodiversity*". Such FNS designations are the first of the five Partnership Objectives, with Key Result Area (KRA) 1.1 of the Partnership's 2019-2028 Strategic Plan (https://eaaflyway.net/wp-content/uploads/2019/07/MOP10_D01_Strategic-Plan-2019-2028_r_MJ.pdf) being: "*A comprehensive and coherent Flyway Network of Sites is developed for migratory waterbirds, including sites that are not currently Protected Areas.*"

2. Nomination of a FNS must be made by, or through, the relevant Government Partner of the Flyway Partnership.

3. The Government Partner nominating a site for inclusion in the Flyway Site Network should complete the Site Information Sheet (SIS). The Site Information Sheet provides the basic information about the site and details how the site meets one or more of the Criteria for inclusion in the Flyway Site Network.

4. To ensure access to the latest monitoring and research information, the SIS can be developed in consultation with local, national and international NGOs and experts, particularly those involved with waterbird species for which the site is important.

5. The SIS v2025 is in two Parts. All data and information fields in **Part 1** (fields 1-17) are **required** and **must be filled in**. **Part 2** fields (fields 18-32) provide additional information, but are **optional** to be filled in. However, Partners are encouraged to, where possible, to fill in the information for **Part 2** SIS fields. This information is particularly relevant to informing management planning processes for the FNS and communicating issues that may benefit from support and international cooperation.

6. The completed SIS (and maps) with a letter of nomination from the EAAF Partner's National Focal Point (NFP) should be sent to the EAAFP Secretariat (secretariat@eaaflyway.net). Compilers should provide an electronic (MS Word) copy of the Site Information Sheet (SIS) and digital versions (e.g. shapefiles) of all maps. Further information about the FNS nomination process is provided on: https://eaaflyway.net/become-a-site/

7. The SIS is based on the Information Sheet on Ramsar Wetlands (RIS). If the site proposed for the Flyway Site Network is an existing Wetland of International Importance (Ramsar Site) then much of the data and information to complete the SIS can be transferred from the Ramsar RIS, especially if the boundary of the sites covers the same area.

8. Most Flyway Network Sites also qualify for designation as Wetlands of International Importance (Ramsar Sites). If an FNS is to subsequently be proposed as a Ramsar Site, much of the data and

information provided in the FNS SIS can be also used to fill in the Information Sheet on Ramsar Wetlands (RIS).

PART 1 SIS fields. Essential data and information fields, which must be filled in SIS fields 1-17 **must be completed** for the SIS to be valid

SIS field 1. Name and contact details of the compiler of this form.
If more than one compiler has contributed to the completion of the SIS, provide the name(s) and contact details of each person.

SIS field 2. Date this SIS was completed/updated: DD/MM/YYYY

SIS field 3. Country: Name of country

SIS field 4. Name of the Flyway Network Site: Accepted English transcription of the Site's name.

SIS field 5. Designation of new Flyway Network Site or update of existing Site. Tick the relevant box.

SIS field 6. For SIS updates only, changes to the site since its designation or earlier update:

6a) Site boundary and area (tick the relevant box(es):

The Flyway Network Site boundary and site area are unchanged ☐

or

If the site boundary has changed:

i) the boundary has been delineated more accurately ☐; or

ii) the boundary has been extended ☐; or

iii) the boundary has been reduced ☐

6b) If the boundary or area has been reduced, describe what area(s) have been removed from the FNS, and explain why.

6c) Describe briefly any major changes to the ecological status of the Flyway Network Site, including in the application of the designation Criteria, since the previous SIS for the site.

7. Map of site. Provide digital versions (e.g. shapefiles) of all maps.

The most up-to-date available and suitable map of the wetland should also be appended to the SIS (only in digital format and shape file). The map must clearly show the boundary of the proposed Flyway Network Site. If the site is a national protected area, a Ramsar Site, World Heritage Site or ASEAN Heritage Park, these boundaries may also be included.

If the site is composed of more than one separate unit area, also show the boundary of each of these together with the names (or labels) used to identify and differentiate these units.
Refer to the "Digitising Site Boundaries in Google Earth" file linked here.

Setting the boundary of a Flyway Network Site. FNS are designated because they support internationally important numbers of **migratory waterbirds**. The boundaries of the FNS should be set to cover an ecological unit (or units) covering all important feeding, roosting and breeding areas of these migratory waterbirds in the area. The habitats within an FNS will usually include wetlands supporting migratory waterbirds. But, where appropriate, the FNS can and should include other non-wetland habitats which support such migratory waterbirds. These can be, for example, areas of agricultural land used as feeding areas by waterbirds such as cranes, ducks and geese; or trees nearby used as roosting or nesting areas by waterbirds such as herons, storks, ibises and cormorants.

If the area being designated as an FNS has also been designated as a Wetland of International Importance (Ramsar Site) it should often, but not always, have the same boundaries. For example, a Ramsar Site may have been designated also under other criteria not covered by the FNS criteria, such as for representative, rare or unique types of wetlands (Ramsar Criterion 1).

Conversely, recent information (such as tracking studies of migratory waterbirds or habitat changes) can show that additional areas, not included in an earlier designation of the Ramsar Site, are now known to be important for migratory waterbirds, either as feeding, roosting or nesting areas and so should be included in the FNS. In this situation, the Partner may also wish to consider updating and extending the boundaries of a previously designated Ramsar Site.

8. Geographical coordinates. Provide latitude/longitude, in decimal degrees.

9. Elevation (metres). Provide the elevation above sea-level, in metres.

10. Area (hectares). Provide the area of the Flyway Network Site, in hectares.

11. General overview of the site. Provide a general description of the Flyway Network Site and its importance to migratory waterbirds (maximum 300 words).

12. Justification Flyway Network Site Criteria.

For inclusion of a wetland as internationally important as a Flyway Network Site, **one or more of the following Criteria must be met**:

> **Criterion i.** It regularly supports >20,000 migratory waterbirds (equivalent of Ramsar Criterion 5);
>
> **Criterion ii.** It regularly supports >1% of the individuals of a biogeographic population of a migratory waterbird (equivalent of Ramsar Criterion 6);
>
> **Criterion iii.** It regularly supports appreciable numbers of a biogeographic population of a globally threatened (Critically Endangered (CR), Endangered (EN) or Vulnerable (VU)) migratory waterbird species (equivalent of Ramsar Criterion 2);

Criterion iv. It is a "migratory staging area" that regularly supports >5,000 migratory waterbirds (no equivalent Ramsar Criterion);

Criterion v. It is a "migratory staging area" that regularly supports >0.25% of a biogeographic population of a migratory waterbird (no equivalent Ramsar Criterion);

Criterion vi. It supports migratory waterbirds at a stage of their life cycles important for the maintenance of their flyway populations, including as a refuge during adverse conditions (equivalent of Ramsar Criterion 4).

FNS Criteria being applied. Tick the box(es) for each Criterion being applied to the designation of this Flyway Network Site**:**

i ☐; ii ☐; iii ☐; iv ☐; v ☐; vi ☐

Guidance for applying Criterion I (>20,000 migratory waterbirds):

1. Only migratory populations of waterbird species should be included in the total waterbird counts – resident species and populations and introduced/non-native species do not contribute to FNS qualification under this Criterion. For the official list of migratory populations go to the *Waterbirds Populations Portal (WPP)* EAAFP *tab* on: https://wpp.wetlands.org/explore?conservation=3

2. To meet the terms of "regularly supports" (as defined in the Convention on Wetlands' *Strategic Framework https://rsis.ramsar.org/RISapp/StatDoc/strategic_framework_en.pdf*), waterbirds should be present at the site in most, and preferably all, recent years.

3. The most recent five years of total waterbird counts should be provided, and the **average annual count over this year period** must exceed the threshold of >20,000 migratory waterbirds. Counts should be for years of less than 10 years old. Note that it is not correct for the application of this Criterion to provide just the total of several of years of counts.

4. If fewer than five recent years of counts are available, but important numbers of waterbirds occur at the site, consider applying Criterion vi. (supports migratory waterbird populations at a stage of their life-cycles importance for the maintenance of their flyway populations).

5. If more than one waterbird count for a year has been made, for each species of migratory waterbird select the highest count in each year (regardless of time of year), and add these up to provide the maximum total waterbird count for each year. For species such as Bean Goose *Anser fabalis* if two subspecies are recorded at the site and can be counted separately, separate maximum total subspecies counts should be provided for these. If not, provide counts as a single species.

Guidance for applying Criterion ii* (>1% of one or more populations of migratory waterbirds)*:

1. Only migratory populations of waterbird species qualify under this Criterion – resident species and populations and introduced/non-native species do not contribute to FNS qualification under this Criterion.

2. This Criterion can be applied only to waterbird populations for which there is a 1% population threshold established. For 1% thresholds go to the *Waterbirds Populations Portal* EAAFP *list* on: https://wpp.wetlands.org/explore?conservation=3 For some relevant EAAFP populations (such as Whiskered Tern), there is no population size estimate and hence no 1% threshold. Such populations cannot be included in the justification for this Criterion.

3. To meet the terms of "regularly supports" (as defined in the Convention on Wetlands' *Strategic Framework* *https://rsis.ramsar.org/RISapp/StatDoc/strategic_framework_en.pdf*), the waterbirds should be present at the site in most, preferably all, recent years.

4. Provide the most recent five years of waterbird counts for each qualifying species, and the **average annual count over this year period**. This **annual average** must exceed the threshold of >1% of the relevant population. Counts should be for years of less than 10 years old. Note that it is not correct for the application of this Criterion to provide just the total of several of years of counts.

5. If fewer than five recent years of counts are available, but important numbers of waterbirds occur at the site, consider applying Criterion vi. (supports migratory waterbird populations at a stage of their life-cycles importance for the maintenance of their flyway populations).

6. If more than one waterbird count for a year has been made, for each population of migratory waterbird select the highest count in each year (regardless of time of year).

7. If more than one biogeographic population of a migratory waterbird species is considered to occur at the site (but different populations cannot be distinguished in the field), in line with the guidance in the Convention on Wetland's *Strategic Framework* (paragraph 201) select the population with the largest 1% threshold for the application of this Criterion.

Guidance for applying Criterion iii (Globally threatened migratory waterbird species):

1. Only migratory species of globally-threatened waterbirds qualify under this Criterion – resident species and populations and introduced/non-native species do not contribute to FNS qualification under this Criterion.

2. This Criterion can be applied only to waterbird species listed on the IUCN Red List as globally threatened (Critically Endangered (CR), Endangered EN) or Vulnerable (VU)). For the latest Red List categories of EAAFP waterbird species go to the *Waterbirds Populations Portal (WPP) EAAFP list* on: https://wpp.wetlands.org/explore?conservation=3. Waterbird species with other IUCN Red List categories (e.g. Near-Threatened (NT), Least Concern (LC), or Data Deficient (DD)) do not qualify under this Criterion.

3. To meet the terms of "regularly supports" (as defined in the Convention on Wetlands' *Strategic Framework* *https://rsis.ramsar.org/RISapp/StatDoc/strategic_framework_en.pdf*), a Globally Threatened waterbird should be present at the site in most, preferably all, recent years.

4. To qualify under this Criterion, a globally threatened waterbird species should also be present in "appreciable numbers". This implies that there should be more than a single individual of the species present. However, what constitute an "appreciable number" will vary greatly between such species depending on their total population size (see https://wpp.wetlands.org/explore?conservation=3). For globally threatened waterbirds with a very small population size, an "appreciable number" can be a very small number of individuals occurring at the site.

5. Provide the most recent five years of waterbird counts for each qualifying species, and the **average annual count** over this year period. If more than one waterbird count for a year has been made, for each population of globally threatened migratory waterbird select the highest count in each year (regardless of time of year). Counts should be for years of less than 10 years old. Note that for the application of this Criterion the average annual count of the species does not have to exceed its 1% population threshold.

6. If fewer than five recent years of counts are available, but important numbers of waterbirds occur at the site, consider applying Criterion vi. (supports migratory waterbird populations at a stage of their life-cycles importance for the maintenance of their flyway populations).

Guidance for applying Criterion iv (>5,000 migratory waterbirds during migratory staging)***:***

1. Only migratory populations of waterbird species should be included in the total waterbird counts – *resident* species and populations and introduced/non-native species do not contribute to FNS qualification under this Criterion.

2. To meet the terms of "regularly supports" (as defined in the Convention on Wetlands' *Strategic Framework* *https://rsis.ramsar.org/RISapp/StatDoc/strategic_framework_en.pdf*), waterbirds should be present at the site during migratory staging in most, preferably all, recent years.

3. In the table, identify whether the qualifying counts are for northwards (usually March-June) or southwards (usually August-October) or for both migratory staging periods, and provide the month(s) of the counts.

4. If more than one waterbird count during the migratory staging period(s) for a year has been made, for each species of migratory waterbird select the **highest count in each migration period (northwards or southwards) and add these up separately** to provide the maximum total count for each migratory period of each year.

5. The most recent five years of total waterbird counts should be provided, and the **average annual count** over this year period must exceed the threshold of >5,000 migratory waterbirds during the staging period. Counts should be for years of less than 10 years old. Note that it is not correct for the application of this Criterion to provide just the total of several of years of counts.

6. If fewer than five recent years of counts are available, but important numbers of waterbirds occur at the site, consider applying Criterion vi. (supports migratory waterbird populations at a stage of their life-cycles importance for the maintenance of their flyway populations).

Guidance for applying Criterion v (>0.25% of one or more populations of migratory waterbirds during migratory staging)***:***

1. Only migratory populations of waterbird species qualify under this Criterion – resident species and populations and introduced/non-native species do not contribute to FNS qualification under this Criterion.

2. This Criterion can be applied only to waterbird populations for which there is a 1% population threshold established. For 1% thresholds go to the *Waterbird Population Portal (WPP) EAAFP list* on: https://wpp.wetlands.org/explore?conservation=3

3. To meet the terms of "regularly supports" (as defined in the Convention on Wetlands' *Strategic Framework* *https://rsis.ramsar.org/RISapp/StatDoc/strategic_framework_en.pdf*), qualifying waterbird populations should be present at the site in most, preferably all, recent years.

4. In the table, identify whether the qualifying counts are for northwards (usually March-June) or southwards (usually August-October) or for both migratory staging periods, and provide the month(s) of the counts.

5. If more than one waterbird count for a migratory staging season has been made, for each population of migratory waterbird select the highest count in each season/year separately.

6. The most recent five years of waterbird counts for each qualifying species should be provided, and the **average annual count** over this year period must exceed the threshold of >0.25% of the relevant population. Counts should be for years of less than 10 years old. Note that it is not correct for the application of this Criterion to provide just the total of several of years of counts.

7. If fewer than five recent years of counts are available, but important numbers of waterbirds occur at the site, consider applying Criterion vi. (supports migratory waterbird populations at a stage of their life-cycles importance for the maintenance of their flyway populations).

8. If more than one biogeographic population of a migratory waterbird species is considered to occur at the site (but different populations cannot be distinguished in the field), in line with the guidance in the Convention on Wetlands' *Strategic Framework* (paragraph 201) select the population with the largest 1% threshold for the application of this Criterion.

Guidance for applying Criterion vi (supports migratory waterbird populations at a stage of their life-cycles important for the maintenance of their flyway populations)***:***

1. Only migratory populations of waterbird species qualify under this Criterion – resident species and populations and introduced/non-native species do not contribute to FNS qualification under this Criterion.

2. The justification of this Criterion needs to provide evidence that important numbers of individuals and populations of migratory waterbirds depend on the site, at key stages (e.g. non-breeding, migratory staging) in their life-cycles and/or as critical refugia during adverse conditions such as periodic droughts (see also Criterion 4 application advice – Convention on Wetlands' Strategic Framework paragraphs 163-173 *https://rsis.ramsar.org/RISapp/StatDoc/strategic_framework_en.pdf*).

3. In general, this Criterion should be applied in conjunction with other FNS Criterion, but this is not required. It can, for example, be applied if:

- internationally important numbers of migratory waterbirds are known to occur in some recent years but there are insufficient years of counts to fully apply other Criteria; or

- important numbers of waterbirds occur during periods of drought, which happens in only some, but not all, years; or

- important numbers of waterbirds occur during periods of severe cold weather, which happens in only some, but not all, years.

13. Habitat Types: List the habitat types present (see list of Convention on Wetland's wetland types in Annex 1). List the habitat types in order of their area in the Flyway Network Site, starting with the habitat type with the largest area.

14. Jurisdiction: Include territorial, e.g. state/region, and functional/sectoral, e.g. Ministry of Agriculture/Department of Environment, etc.

15. Land tenure/ownership: Include information on who has ownership or tenure of different parts of the FNS. This may be one or more than one government agency, and may include community or privately-owned land or owned by a corporation/enterprise.

16. Management Authority: Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the Flyway Network Site 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 area.

17. Bibliographical references: Provide a list of key technical references relevant to the wetland, including management plans, major scientific reports, and bibliographies, if such exist. 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.

Provide a copy of the management plan or a link to it.

When a large body of published material is available about the site, only the most important references need to be cited, with priority being given to recent literature containing extensive bibliographies.

PART 2. Additional data and information fields (Optional to be filled in)

Provide additional data and information, if available, in SIS fields 18-33. This information is particularly relevant to informing management planning processes for the FNS and communicating issues that may benefit from support and international cooperation.

18. 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.

19. Physical features of the catchment area: Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

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

21. General ecological features: Provide further description, as appropriate, of the primary habitats, vegetation types, plant and animal communities present in the FNS, and the ecosystem services of the site and the benefits derived from them.

22. 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 provided as supplementary information in SIS field 33.*

23. Noteworthy fauna: Provide additional information on particular species and why they are noteworthy (expanding as necessary on waterbird information provided in SIS field12). If important numbers of resident (i.e. non-migratory) waterbirds also occur at the site, provide this information (species/population; counts; percentage of population size) in this field. *Do not include here taxonomic lists of species present – these may be provided as supplementary information in SIS field 33.*

24. Social, economic and cultural values:

24a) 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:

24b) Is the site considered of international importance for having, in addition to relevant ecological values, significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?:

Yes ☐ or No ☐

If yes in 24b), describe this importance under one or more of the following categories:

I. The site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

II. The site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

III. The ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

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:

25. Current land (including water) use:

a) Within the Flyway Network Site:

b) In the surroundings/catchment:

The water flows from the surroundings/catchment to the wetland are important to maintain the ecological character of the wetland. The water flows entering the wetland may be affected by water extraction for agriculture, hydropower, industrial or human use; it may also serve as a source of pollutants, nutrients and pesticides. Provide any information that would help to understand the use situation.

26. 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:

Provide further details of each factor (threat) in field 32.

27. Conservation measures taken:

27a) List national and/or international category and legal status of protected areas, including boundary relationships with the Flyway Network site:

In particular, if the Flyway Network Site is partly or wholly a Wetland of International Importance (Ramsar Site), World Heritage Site, ASEAN Heritage Park and/or a UNESCO Biosphere Reserve, give the name(s) and reference number(s) of the site under these designations.

27b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick each box or boxes as appropriate):

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

See Annex 2 for descriptions of each of these IUCN protected area categories.

27c) Does an officially approved management plan exist?:

Yes ☐ or No ☐

If Yes, share a copy of the management plan with the Secretariat, either in print, pdf or as a link to a downloadable document.

If Yes, what time period does the management plan cover?

20xx – 20xx

If Yes, is the management plan being implemented?:

Yes ☐ or No ☐

27d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:

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

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring by the management authorities, universities or others; existence of a field research station, etc.

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

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

31. Current recreation and tourism:

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

32. Threats:

Which of the following threats is has occurred historically – and although the threat has ceased its effects are still present (H), - current (C) or potential (P)?

33. Taxonomic lists of species (flora and fauna):

If available, you may wish to provide here taxonomic lists of species (flora and fauna) as supplementary information to the SIS (see fields 22 and 23).

Annex 1: Convention on Wetlands (Ramsar) Classification System for Wetland Type

The codes are based upon the Convention on Wetlands (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 the Ramsar Site RIS and the FNS SIS, the Convention on Wetlands' Secretariat has provided tabulations for Marine/Coastal Wetlands and Inland Wetlands of some of the characteristics of each Wetland Type. These are provided below.

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**.
Ga **Bivalve (shellfish) reefs**.
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

Tabulations of Wetland Type Characteristics

Marine/Coastal Wetlands:

Saline water	Permanent	< 6 m deep	A
		Underwater vegetation	B
		Coral reefs	C
	Shores	Rocky	D
		Sand, shingle or pebble	E
Saline or brackish water	Intertidal	Flats (mud, sand or salt)	G
		Bivalve (shellfish) reefs	Ga
		Marshes	H
		Forested	I
	Lagoons		J
	Estuarine waters		F
Saline, brackish or fresh water	Subterranean		Zk(a)
Fresh water	Lagoons		K

Inland Wetlands:

Fresh water	Flowing water	Permanent	Rivers, streams, creeks	M
			Deltas	L
			Springs, oases	Y
		Seasonal/intermittent	Rivers, streams, creeks	N
	Lakes and pools	Permanent	> 8 ha	O
			< 8 ha	Tp
		Seasonal/intermittent	> 8 ha	P
			< 8 ha	Ts
	Marshes on inorganic soils	Permanent	Herb-dominated	Tp
		Permanent/ Seasonal/intermittent	Shrub-dominated	W
			Tree-dominated	Xf
		Seasonal/intermittent	Herb-dominated	Ts
	Marshes on peat soils	Permanent	Non-forested	U
			Forested	Xp
	Marshes on inorganic or peat soils	High altitude (montane)		Va
		Tundra		Vt
Saline, brackish or alkaline water	Lakes	Permanent		Q
		Seasonal/intermittent		R
	Marshes & pools	Permanent		Sp
		Seasonal/intermittent		Ss
Fresh, saline, brackish or alkaline water	Geothermal			Zg
	Subterranean			Zk(b)

Annex 2: IUCN Protected Areas Categories System

For further guidance on the IUCN Protected Areas Categories for completing SIS section 27b, see: https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf

IUCN protected area management categories classify protected areas according to their management objectives. The categories are recognized 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/geomorpholigal 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

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