

Appendix 2

Ramsar Classification System for Wetland Type

The Ramsar Convention defines 'wetland' habitat as follows:

"For the purpose of this Convention wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres." Wetlands "may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands".

More information is at

http://www.ramsar.org/key_ris_types.htm

Note that this definition includes shallow subtidal marine areas, such as some coral reefs, as well as 'dry' water-associated features such as atolls, small islands, rocky or sandy beaches, sand-dunes, sand-banks and sea-cliffs. Thus, many 'dry' breeding sites of seabirds and waterbirds are situated within habitat defined as 'wetland' by Ramsar.

Marine/coastal wetlands

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

Inland wetlands

- 1 Permanent inland deltas.
- 1 Permanent rivers/streams/creeks; includes waterfalls.
- 1 Seasonal/intermittent/irregular rivers/streams/creeks.
- 1 Permanent freshwater lakes (over 8 hectares in extent); includes large oxbow lakes.
- 1 Seasonal/intermittent freshwater lakes (over 8 hectares in extent); includes floodplain lakes.
- 1 Permanent saline/brackish/alkaline lakes.
- 1 Seasonal/intermittent saline/brackish/alkaline lakes and flats.
- 1 Permanent saline/brackish/alkaline marshes/pools.
- 1 Seasonal/intermittent saline/brackish/alkaline marshes/pools.
- 1 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.
- 1 Seasonal/intermittent freshwater marshes/pools on inorganic soils; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.
- 1 Non-forested peatlands; includes shrub or open bogs, swamps, fens.
- 1 Alpine wetlands; includes alpine meadows, temporary waters from snowmelt.
- 1 Tundra wetlands; includes tundra pools, temporary waters from snowmelt.
- 1 Shrub-dominated wetlands; shrub swamps, shrub-dominated freshwater marshes, shrub carr, alder thicket on inorganic soils.
- 1 Freshwater, tree-dominated wetlands; includes freshwater swamp forests, seasonally flooded forests, wooded swamps on inorganic soils.
- 1 Forested peatlands; peat swamp forests.
- 1 Freshwater springs; oases.
- 1 Geothermal wetlands.
- 1 Karst and other subterranean hydrological systems; inland.

Note: 'floodplain' is a broad term used to refer to one or more 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.
- 1 Ponds; includes farm ponds, stock ponds, small tanks; generally below 8 hectares in extent.
- 1 Irrigated land; includes irrigation channels and rice fields.
- 1 Seasonally flooded agricultural land (including intensively managed or grazed wet meadow or pasture).
- 1 Salt-exploitation sites; salt-pans, salinas, etc.
- 1 Water-storage areas; reservoirs/barrages/dams/impoundments (generally over 8 hectares in extent).
- 1 Excavations; gravel/brick/clay pits; borrow pits, mining pools.
- 1 Wastewater treatment areas; sewage farms, settling ponds, oxidation basins, etc.
- 1 Canals and drainage channels, ditches.
- 1 Karst and other subterranean hydrological systems, human-made.