Wetland City Accreditation Guidance Note for Cities

Background and context

Resolution XI.II of the Conference of Contracting Parties requested that the Convention explores establishing a wetland city accreditation, which may in turn provide positive branding opportunities for cities that demonstrate strong and positive relationships with wetlands (http://www.ramsar.org/document/resolution-xi11-principles-for-the-planning-and-management-of-urban-and-peri-urban-wetlands). As a response, Resolution XII.10 of the Conference of Contracting Parties established the "Wetland City Accreditation of the Ramsar Convention" (http://www.ramsar.org/document/resolution-xii10-wetland-city-accreditation-of-the-ramsar-convention).

The criteria used for the *Wetland City Accreditation* are based on the principles adopted in Resolution XI.11 and the criteria adopted in Resolution XII.10. Additional information can be found in the Briefing Note produced by the Ramsar Scientific and Technical Review Panel on 'Towards the wise use of urban and peri-urban wetlands' which is available at http://www.ramsar.org/document/briefing-note-6-towards-the-wise-use-of-urban-and-peri-urban-wetlands. Wider ranging fact sheets on many aspects of wetlands and the Ramsar Convention can be downloaded from http://www.ramsar.org/resources/ramsar-fact-sheets.

General guidance

The *Wetland City Accreditation* Nomination Form must be completed in one of the Convention's three working languages, namely English, French, or Spanish. The *Wetland City Accreditation* Nomination Form and this accompanying *Guidance Note for Cities* are available in each of the three working languages.

The information provided in the *Wetland City Accreditation* Nomination Form should be clear and succinct, and the total length of a completed *Wetland City Accreditation* Nomination Form should not exceed the specified word limits given for each field.

In the case of a city where the wetlands have been well-studied and well-documented, or which are the subject of special field investigations, far more information may be available than can be accommodated in the *Wetland City Accreditation* Nomination Form. Nominating cities must provide succinct but comprehensive summaries in the appropriate fields. They may provide additional information, such as taxonomic lists of species' status, management plans, copies of legal instruments, etc.

The Wetland City Accreditation is valid for 6 years, after which it must be renewed, providing that it continues to fill each of the 6 criteria, which then need to be reviewed by IAC.

Specific guidance on completing the fields of the Wetland City Accreditation Nomination Form

1. Background information

1a. **Country:** The official (short) version of the Contracting Party/country name.

1b. **Name of city:** An eligible 'city' for the Wetland City Accreditation may be a city or any other type of human settlement according to the definition given by United Nations Centre for Human Settlement. The term human settlements is an integrative concept that comprises: (a) physical components of shelter and infrastructure; and (b) services to which the physical elements provide support, that is to say, community services such as education, health, culture, welfare, recreation and nutrition. (Source: United Nations (1997) *Glossary of Environment Statistics: Studies in Methods*, Series F, No. 67. Department for Economic and Social Information and Policy Analysis, Statistics Division. United Nations, New York. 96pp.).

1c. **Geographical coordinates**: The geographical coordinates of the *approximate* centre of the city expressed in *degrees and minutes of latitude and longitude* (e.g. in the format: 01°24'S 104°16'E or 010°30'N 084°51'W).

1d. **Administrative and wetland map**: Tick the yellow box to confirm that a map has been provided. The most up-to-date available and suitable map of the city and its wetland should be appended to the *Wetland City Accreditation* Nomination Form (in hardcopy and, if possible, also in digital format). At least a hardcopy map is required for the consideration of the City for accreditation. The map must clearly show the administrative boundary of the city, the boundary of any designated Ramsar Site(s) and other wetland areas. If the map has been prepared in digital (GIS) format, please send a GIS file providing geo-referenced site boundary vectors and attribute tables, and please also send a separate image file, showing the site boundaries, in a common image format (TIFF, BMP, JPG, GIF, etc.).

1e. **Area of the city**: The total area of the city within the formal administrative boundaries in hectares.

1f. **Approximate area of wetlands within the city boundaries**: Indication of the total area of wetlands within the administrative boundaries, indicating, as far as possible, how much is natural and how much is human made. If the areas of discrete wetland units are known, please also indicate each of these together with the names (or labels) used to identify and differentiate these units and show them on the administrative and wetland map.

1g. **Wetland types**: In this field list the full range of wetland types occurring within the city. Where possible list them in order of their dominance (by area) starting with the wetland type with the largest area. 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, provides the description of what types of wetland are covered by each of the wetland type codes (see Appendix I). Note that the wetland types are grouped in three major categories: marine-coastal, inland, and human-made wetlands, and that wetland types under two or more of these categories may be present within a Ramsar site, particularly if it is large.

Since some Marine/Coastal wetland types (e.g. Estuarine waters (type *F*) or Intertidal Forested Wetlands (type *I*)) can occur far inland from the coastline, and conversely Inland Wetlands types can occur close to the coastline, please also indicate with additional text in this section the general geographical location of the site relative to the coastline, as either inland or marine/coastal.

When listing the areal dominance of the wetland types, if possible provide the area, although it is recognised that this may be difficult for complex situations with a wide variety of wetland types.

2. Accreditation criteria

Group A: Criteria based on delivering the conservation and wise use of wetlands

A1. **Name any Ramsar Site that is fully or partly in the city administrative boundaries**: A city can be nominated if there is a Ramsar Site fully or partly situated within its administrative boundaries. Provide the precise name of the designated Ramsar Site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parenthesis after the precise name. The official Ramsar Site name and number as described on the Ramsar Information Sheet is available on https://rsis.ramsar.org/). If none, state 'None'.

A2. **Name any other significant wetland that is fully or partly in the city administrative boundaries**: A city can be nominated even if there is not a Ramsar Site fully or partly situated within its administrative boundaries but there are other wetlands that are considered to be significant in terms of their contribution to the provision of ecosystem services on which the city depends. Provide the precise name of the wetland (or wetlands) in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parenthesis after the precise name. Indicate whether any wetland within the administrative boundaries has a relevant protected area status (either in addition to or separate from Ramsar Site status) in accordance with protected areas categories as established by each Contracting Party and/or based on IUCN categories (Appendix II), other relevant international conservation designations, and, in the case of transboundary wetlands, bilateral or multilateral conservation measures which pertain to all or part of the site. If a reserve has been established, give the date of establishment and size of the protected area. If only a part of the wetland is included within a protected area, the area of wetland habitat that is protected should be noted. .

A3. **National and/or local policy, legislative or other appropriate measures and regulatory instruments**: A city can be considered for accreditation if it can demonstrate that development avoids degrading and destroying wetlands. In order to achieve this, the city needs to have a strong set of legal or policy instruments in place supported by appropriate regulation and enforcement. These could include national, state or city laws, local bye-laws, regulations, policies and plans. Describe the national and/or local policy, legislative measures and regulatory instruments that are in use by the city to proactively prevent the degradation and loss of wetlands. (Please note that field is limited to a maximum of 2500 characters).

A4. **Restoration and creation of wetlands**: Within a city environment there is considerable evidence that wetlands can play a significant role in enhancing human well-being. A city can be considered for accreditation if it can demonstrate that it proactively encourages the restoration or creation of wetlands as elements of urban, and especially water management infrastructure. For instance, the city might have created multi-functional wetlands that can help with managing urban flooding whilst also providing other benefits such as recreation or local climate regulation. Provide specific examples (site and summary of implemented measures) of where wetlands have been created or restored within the city as elements of urban infrastructure, such as to protecting from hazards, cooling climate, improving water quality, or providing

opportunities for education, etc. (Please note that field is limited to a maximum of 2500 characters).

A5. **Spatial planning and integrated city management**: The wise use of wetlands within a city context can be strongly influenced by good planning, stewardship and management, which in turn can contribute to sustainable social and economic development for current and future generations. A city can be considered for accreditation if it can demonstrate that it considers the importance of wetlands within elements of spatial planning and integrated city management (such as through Integrated River Basin Management, spatial zonation, water resource management, the development of transport infrastructure, agriculture production, fuel supply, poverty alleviation, pollution control, flood risk management, disaster risk reduction, etc.). Describe the measures (plans, policies, procedures, guidance, legislation, etc.) that ensure that the importance of wetlands is considered fully within elements of spatial planning and integrated city management. (Please note that field is limited to a maximum of 2500 characters).

A6. **Principles of inclusivity, empowerment, and participation of indigenous and local communities and the civil society**: The full participation of indigenous and local communities, civil society, municipalities and government sectors in city spatial planning and wetland management decision-making is vital to creating sustainable human settlements. A city can be considered for accreditation if it can demonstrate that it has adopted the principles of inclusivity, empowerment, and participation of indigenous and local communities and the civil society in decision-making and city planning and management. Describe how indigenous and local communities have been engaged and participate in the management of wetland-related issues and any formal instruments that may exist to ensure that full and active participatory approaches are pursued. (Please note that field is limited to a maximum of 2500 characters).

A7. **Raised levels of public awareness about the values of wetlands**: The benefits provided by wetlands and their associated values are often poorly considered in city decision-making. Therefore, these values need to be articulated clearly so that citizens and urban planners can make informed decisions. A city can be considered for accreditation if it can demonstrate that it has raised levels of public awareness about the values of wetlands, and encouraged the wise use of wetlands by a diverse range of stakeholders and communities through, for example, establishing operational wetland education or information centres, regularly disseminating information on wetlands, establishing and implementing school education programmes, etc. Describe the types of activities that have been undertaken and also how their impact, in terms of raising awareness and contributing to the wise use of wetlands, has been monitored and assessed. (Please note that field is limited to a maximum of 2500 characters).

A8. **World Wetlands Day**: World Wetlands Day is celebrated every year on 2 February**.** This day marks the date of the adoption of the Convention on Wetlands on 2 February 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea. Since 1997, the Ramsar Secretariat has provided outreach materials to help raise public awareness about the importance and value of wetlands. A city can be considered for accreditation if it can demonstrate that it has proactively promoted events around World Wetlands Day in order to raise awareness on wetlands and their importance to the city. Describe the types of events that have been delivered to celebrate World Wetlands Day in the city. (Please note that field is limited to a maximum of 2500 characters).

A9. **Established a local committee**: For the accreditation process to be robust requires knowledge and experience to be drawn from several sectors and stakeholders. The recommended approach is to establish a functional committee comprising appropriate knowledge and experience on wetlands. A city can be considered for accreditation if it can demonstrate that it has established a local committee (or similar structure) to support and to further the aims of the Wetland City Accreditation process. Such a committee should contain appropriate knowledge and experience on wetlands and should be representative of stakeholders and communities. Describe the committee, its participants, mandate and operation. (Please note that field is limited to a maximum of 2500 characters).

Group B: Complementary approaches

B1. **Standards on water quality and sanitation, including waste management**: Many cities face challenges around the management of waste, protecting water quality, sanitation and hygiene. All of these issues will affect people's health and wellbeing. Interventions are often necessary in order to address local conditions and community needs. Many solutions and management measures will require integrated approaches in order to both safeguard human wellbeing but also to ensure the wise use of wetlands. A city can be considered for accreditation if it can demonstrate that it has applied standards on water quality (which can include chemical or biological standards) and sanitation, including waste management facilities which include collection and treatment for solid waste and wastewater (industrial, domestic and stormwater). Describe the standards, policies and regulatory framework which ensures delivery on water quality and sanitation standards. (Please note that field is limited to a maximum of 2500 characters).

B2. **Ecosystem services**: Ecosystem services are the benefits that nature provides human society. In the city environment, wetlands and the range of services they provide are essential elements of the supporting structure of urban and peri-urban settlements. Contracting Parties to the Ramsar Convention are expected to manage all their wetlands, including Ramsar Sites, so as to maintain their ecological character. In order to do this requires the ecological character of a wetland to be described. The Ramsar Convention has defined ecological character as: "*the combination of the ecosystem components, processes and benefits/services that characterise the wetland at a given point in time*". Therefore the range of ecosystem services that a wetland provides is a key component of its overall ecological character. Ecosystem services are commonly grouped into four main categories: provisioning, regulating, cultural and supporting services. Further information on the types of ecosystem services provided by wetlands is expanded in Appendix III.

A city can be considered for accreditation if it can demonstrate that it proactively recognises the ecosystem services that wetlands provide and has integrated these multiple values into decision making. Where appropriate, special attention should be applied to describing sustainable agriculture, forestry, fisheries, tourism and the cultural values of wetlands. Describe how the different provisioning, regulating, cultural and supporting ecosystem services are recognised and the benefits that they provide human society are integrated into planning and management decision-making. Where possible, illustrate with examples. Ensure that the consideration of ecosystem services is as comprehensive and inclusive as possible. (Please note that each field is limited to a maximum of 1000 characters per ecosystem service category).

B3. **Linkages between local communities and wetlands**: Urban development and wetland management should adopt the principles of inclusivity, empowerment and participation with local communities. A city can be considered for accreditation if it can demonstrate that there is

a close link between local communities and the wetlands. Describe how local communities are engaged with the wise use of wetlands and how the communities benefit from the services the wetlands provide. (Please note that field is limited to a maximum of 2500 characters).

3. City approval

An authorised representative of the city authority making the application needs to check and approve the accreditation form against the guidance provided. It is essential that ALL questions are answered and that appropriate supporting information is provided.

In the case of several cities making a joint submission, a representative of each authority needs to check and approve the form, and then send it to the country's Ramsar Administrative Authority who will formally submit it the completed *Wetland City Accreditation* Nomination Form to the Ramsar Convention Secretariat. If more than three authorities are making the submission please insert further boxes.

Please provide the full name, position, address and contact details of the city authority. The Accreditation Form should be signed and dated prior to submission to the country's Ramsar Administrative Authority.

The head of state or government or the Foreign Office of each Contracting Party designates a national agency to act as the implementing agency, or "Administrative Authority", of the Convention in that country. The Administrative Authority is the focal point for communications with the Ramsar Secretariat and the main agency responsible for the implementation of the treaty. (Unlike many other conventions, Ramsar treats the designated agency as its "national focal point", not any individual within it.) It is expected that the Administrative Authority will consult and cooperate with as many other government agencies and non-governmental institutions as possible in order to ensure the best possible results in achieving the goals of the Ramsar Convention. Each Administrative Authority is expected to designate a National Focal Point to deal with Ramsar Convention Matters. More information on the Ramsar Contracting Parties and the individual contact details within the Administrative Authority is available at http://www.ramsar.org/country-profiles.

4. Endorsement by the Ramsar Administrative Authority

Upon receipt of the completed and endorsed Wetland City Accreditation Nomination Form, the designated National Focal Point for Ramsar Convention matters in the Administrative Authority will check the form and, if appropriate, provide formal endorsement. The Nomination Form will then be sent to the Ramsar Convention Secretariat and subsequently to the Independent Advisory Committee, established under Resolution XII.10, for review and final decision-making.

Separate guidance is available for the National Focal Point for Ramsar Convention matters in the Administrative Authority in order to undertake the appropriate checking of the completed Accreditation Form.

Appendix I: 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 *Wetland City Accreditation* Nomination Form, 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

Tabulations of Wetland Type characteristics

Marine / Coastal Wetlands:

<table>
<tr><td rowspan="5">Saline water</td><td rowspan="3">Permanent</td><td>< 6 m deep</td><td>A</td></tr>
<tr><td>Underwater vegetation</td><td>B</td></tr>
<tr><td>Coral reefs</td><td>C</td></tr>
<tr><td rowspan="2">Shores</td><td>Rocky</td><td>D</td></tr>
<tr><td>Sand, shingle or pebble</td><td>E</td></tr>
<tr><td rowspan="4">Saline or brackish water</td><td rowspan="3">Intertidal</td><td>Flats (mud, sand or salt)</td><td>G</td></tr>
<tr><td>Marshes</td><td>H</td></tr>
<tr><td>Forested</td><td>I</td></tr>
<tr><td colspan="2">Lagoons</td><td>J</td></tr>
<tr><td colspan="2">Estuarine waters</td><td>F</td></tr>
<tr><td>Saline, brackish or fresh water</td><td colspan="2">Subterranean</td><td>Zk(a)</td></tr>
<tr><td>Fresh water</td><td colspan="2">Lagoons</td><td>K</td></tr>
</table>

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 (alpine)		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)

Appendix II: IUCN protected area management categories

Category	Definition
Ia Strict Nature Reserve: protected area managed mainly for science	Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.
Ib Wilderness Area: protected area managed mainly for wilderness protection	Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.
II National Park: protected area managed mainly for ecosystem protection and recreation	Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.
III Natural Monument: protected area managed mainly for conservation of specific natural features	Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.
IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention	Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.
V Protected Landscape/ Seascape: protected area managed mainly for landscape/seascape conservation and recreation	Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.
VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems	Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

Appendix III: Wetland ecosystem services

The information on wetland ecosystem services is compiled from various sources, including the Millennium Ecosystem Assessment Wetland and Water Synthesis (http://www.millenniumassessment.org/en/Synthesis.html), Ramsar Technical Report (http://www.ramsar.org/document/ramsar-technical-report-3-valuing-wetlands-guidance-for-valuing-the-benefits-derived-from) and collaboration between the Ramsar Convention and The Economics of Ecosystems and Biodiversity (TEEB) (http://www.ramsar.org/document/the-economics-of-ecosystem-and-biodiversity-teeb-for-water-and-wetlands-report).

	Ecosystem service	**Example**
Provisioning services	Provision of fresh water	Water used for domestic drinking supply, for irrigation, for livestock, etc.
	Provision of food	Crops, fruit, fish, etc.
	Provision of fibre	Timber for building, wool for clothing, etc.
	Provision of fuel	Fuelwood, peat, etc.
	Provision of genetic resources	Rare breeds used for crop/stock breeding, etc.
	Provision of natural medicines and pharmaceuticals	Plants used as traditional medicines, etc.
	Provision of ornamental resources	Collection of shells, flowers, etc.
	Clay, mineral, aggregate harvesting	Sand and gravel extracted for building use, clay extracted for brick-making, etc.
	Energy harvesting from natural air and water flows	Water wheels driven by flowing water, windmills driven by the wind, etc.
Regulating services	Air quality regulation	Removal of airborne particles from the exhaust of cars, chimneys of industry, dust from agricultural land, etc.
	Local climate regulation	Regulation of the local microclimate, through shading, reducing air temperature, etc.
	Global climate regulation	Regulation of the global climate through control in greenhouse gas emissions, the sequestration of carbon, etc.
	Water regulation	Regulation of flows of surface water during high and low flows, regulation of recharge of groundwater, etc.
	Flood hazard regulation	Regulation and storage of flood water, regulation of intense rainfall events, etc.
	Storm hazard regulation	Regulation of tidal or storm surges, regulation of extreme winds, etc.
	Pest regulation	Control of pest species such as mosquitoes, rats, flies, etc.
	Regulation of human diseases	Presence of species that control the species (vectors) that transmit human diseases such as malaria, West Nile fever, dengue fever, Zika virus, leptospirosis, schistosomiasis, etc.
	Regulation of diseases affecting livestock	Presence of species that control the species (vectors) that transmit diseases to livestock such as leptospirosis, schistosomiasis, duck virus enteritis, highly pathogenic avian influenza, tick-borne diseases, etc.
	Erosion regulation	Regulation of energy environment to reduce risk of erosion, presence of dense vegetation protecting soils, etc.
	Water purification	Cleaning of water, improvement of water quality, deposition of silts, trapping of contaminants and pollutants, etc.
	Pollination	Pollination of plants and crops by pollinators such as bees, butterflies, wasps, etc.
	Salinity regulation	Freshwater in the wetland provides a barrier to saline waters.

	Fire regulation	Providing physical barriers to the spread of fire, maintaining wet conditions to prevent fires spreading, etc.
	Noise and visual buffering	Wetland trees or tall reeds absorbing and buffering the impact of noise.
Cultural services	Cultural heritage	Importance of the wetland for historical or archaeological value, as an example of traditional uses or management practices, as a cultural landscape, etc.
	Recreation and tourism	Importance of the wetland for providing a location for recreation such as fishing, watersports or swimming, or as a tourism destination, etc.
	Aesthetic value	The wetland is overlooked by properties, is part of an of known area of natural beauty, is used as a subject for painters and artists, etc.
	Spiritual and religious value	The wetland holds plays a role in local religious festivals, the wetland is considered as a sacred site, the wetland forms part of a traditional belief system, etc.
	Inspirational value	Presence of local myths or stories relating to the wetland, traditional oral or written histories about the wetland or wetland animals, creation of different art forms associated with the wetland, development of distinct architecture based on the wetland, etc.
	Social relations	Presence of fishing, grazing or cropping communities which have developed within and around the wetland.
	Educational and research	Use of the wetland by local school children for education, site of long-term research and monitoring, site visited by organised educational study tours, etc.
Supporting services	Primary production	Presence of primary producers such as plants, algae, etc.
	Soil formation	Deposition of sediment, accumulation of organic matter, etc.
	Nutrient cycling	Source of nutrients present from inputs from agricultural land, internal cycling of plant material, inputs of nutrients from floodwaters, presence of fauna to recycling nutrients, etc.
	Water recycling	Presence of wetland vegetation and open water result in evapotranspiration and local recycling of water, relatively closed canopies and low exposure to winds retains water in local cycles, sandy or coarse substrates allow exchange with groundwaters, etc.
	Provision of habitat	Presence of locally important habitats and species, presence of species and habitats of conservation concern, etc.