

THE CONVENTION ON WETLANDS
59th Meeting of the Standing Committee
Resumed session
Gland, Switzerland, 23-27 May 2022

SC59/2022 Doc.24.4

Draft resolution on Guidance on Conservation and Management of Small Wetlands

Submitted by China, cosponsored by the Republic of Korea

Secretariat cover note:

The DR submitted for SC59 2021 has been updated to reflect the addition of the Republic of Korea as a co-sponsor. The DR refers to earlier Resolutions VII.20 and VIII.6 on the need for wetland inventories. It refers to Resolution VII.21 on including small wetlands into inventories, but omits reference to Resolution XIII.21 on small wetlands. It includes a technical Annex providing guidelines for conserving and managing small wetlands. The Secretariat invited the **STRP to review** these guidelines and the proposed classification for small wetlands, and to inform the Standing Committee.

Draft resolution on Guidance on Conservation and Management of Small Wetlands

Action requested:

- The Standing Committee is invited to review and approve the attached Draft Resolution for consideration by the 14th meeting of the Conference of the Parties.

Introduction

Short background/contextual information for the Standing Committee

The draft resolution aims to provide technical guidelines for Contracting Parties to strengthen the conservation and management of small wetlands, so as to improve the accuracy of inventory and monitoring as well as the effectiveness of management on small wetlands, mitigate the threats faced by small wetlands, enhance their effects against the great pressure from climate change and biodiversity loss, and improve the ecosystem services of small wetlands.

Financial implications of implementation

Paragraph (number and key part of text)	Action	Cost (CHF)
Not applicable	-	None

Draft Resolution XIV.xx

Guidance on Conservation and Management of Small Wetlands

1. RECALLING the commitments made by Contracting Parties in Article 3.1 of the Convention to promote, as far as possible, the wise use of wetlands in their territory and;
2. RECALLING Resolution VII.20, which urges “all Contracting Parties yet to complete comprehensive national inventories of their wetland resources, including, where possible, wetland losses and wetlands with potential for restoration, to give highest priority in the next triennium to the compilation of comprehensive national inventories”, and the Framework for Wetland Inventory as annexed to Resolution VIII.6;
3. ALSO RECALLING Resolution VII.21, which encourages Contracting Parties to include small wetlands in their science-based inventories, assess the hydrological connectivity and quality of small wetlands, as appropriate, promulgate national and regional policy on small wetlands, and requests the Scientific and Technical Review Panel to prepare guidance on the identification of small wetlands, to address the significant human-induced pressures that threaten small wetlands and prevent further loss;
4. NOTING the great efforts made by many countries to conserve and manage small wetlands that provide examples of small wetland conservation and management;
5. BE AWARE that some wetland inventories carried out by many countries have not prioritized or fully covered small wetlands and set clear standards on their identification, classification and evaluation;

6. CONCERNED that small wetlands are increasingly facing development pressures leading to degradation and loss, and conservation, restoration and management of small wetlands is urgently needed;
7. ALSO BE AWARE that the lack of unified technical specifications and standards for the identification, classification, inventory, conservation, restoration and management of small wetlands, which brings great difficulties in various countries;

THE CONFERENCE OF THE CONTRACTING PARTIES

8. INVITES Contracting Parties to use Annex 1 to guide the identification, classification, inventory, conservation, restoration and management of small wetlands within their territories, and report to the Scientific and Technical Review Panel on its practicability and revision suggestions;
9. ENCOURAGES Contracting Parties to set the specifications on the conservation and management of small wetlands that meets related legislation and plans according to their own national conditions, based on the actual situation of their small wetlands;
10. INVITES Contracting Parties to carry out identification and management of small wetlands following the guidance, designate small wetlands and small wetland complexes that meet the criteria for identifying wetlands for inclusion in the List of Wetlands of International Importance, in an effort to ensure the conservation of their biodiversity, and the maintenance of their ecological, cultural and social values;
11. REQUESTS the Scientific and Technical Review Panel, based on the latest scientific knowledge and feedback from Contracting Parties, to develop and improve the guidance, and include in the Ramsar Framework for Wetland Inventory and handbooks.

Annex

Guidelines for conserving and managing small wetlands

This document specifies the definition, classification, inventory, statistics, mapping, identification of small wetlands, and their restoration strategy, process, model and key points, as well as management standards. It is applicable to the work of small wetlands conservation and management.

Definition and classification

1. Small wetlands are defined here as offshore and coastal wetlands, lake wetlands, marsh wetlands and artificial wetlands with an area of less than 8hm², and river wetlands with a width of less than 10m and a length of less than 5km, with water all year round or part of the time, including natural wetlands such as small pit-ponds, tidal creeks, ditches, seasonal ponds, pothole swamps, springs, and artificial wetlands such as rainwater wetlands, wetland wastewater treatment areas, aquaculture ponds, small paddy fields, and small urban water bodies;
2. According to the natural attributes of wetland formation, small wetlands are divided into natural small wetlands which are formed by the confluence of natural topography and hydrological conditions, with 4 categories and 19 types, and artificial small wetlands, which are formed by human activities, with 6 categories and 15 types (see Attached table 1 for details);

Identification

1. The lower limit for the investigation area on small wetland is 200m² in the urban area and 600 m² in the rural area, while the upper limit is 8hm² (river wetlands should be less than 10m in width and 5km in length). It is generally centered on the open water surface, bordered by woodland, farmland, pond banks, stone slopes or roads, not including small rice paddies, flooded paddy fields or aquatic vegetable fields;
2. One small wetland that meets any of the following criteria can be identified as an important small wetland:
 - a. of unique type in the local region;
 - b. distributed with unique endangered species;
 - c. with unique cultural values;
 - d. of other special conservation significance.
3. Patches are divided according to the type and dominant use pattern of small wetlands. Each small wetland patch shall be encoded and each code are composed of local administrative division code, secondary classification code and sequence code;
4. Investigation content shall be varied in terms of the importance of small wetlands. For general small wetlands, it covers area, type, distribution, vegetation types, land ownership, conservation and management status, wetland utilization status, etc. For important small wetlands, the investigation should cover water, soil environmental condition and wildlife biodiversity as well (see Attached table 2 for details);
5. Remote Sensing (RS), and Global Positioning System (GPS) and Geographic Information System (GIS) should be used to obtain the spatial information of small wetlands, including their type, area, distribution and average elevation. Field investigation should be conducted to obtain the data on water supply, vegetation type and area, land ownership, conservation and management

status, wetland utilization status, water-soil environment quality and wildlife biodiversity. All the data obtained should be summarized and entered into the database in a unified format.

6. Based on various investigation results, the thematic result maps of small wetland inventory can be drawn by GIS software, including the location map of field investigation sample and distribution map of small wetland resources in the investigated area. See Attached table 1 for corresponding color styles and values of different small wetlands.
7. For identifying small wetlands, applications shall be submitted by the local wetland management authority, then reviewed by relevant professional organization. Specific database of important small wetlands and general small wetlands shall be built for differentiated management.
8. A name card should be made for important small wetland, including basic information such as wetland name, location, type, total area, main predominant animals and plants, land ownership, average elevation, wetland utilization status, conservation and management status, and surrounding land use status.

Restoration

1. According to the increasing degradation level of small wetlands, different restoration strategies should be adopted, from protection and conservation, natural restoration, assisted regeneration, to eco-reconstruction.
2. Small wetland restoration processes are suggested as follows:
 - a. Investigation and assessment of ecological status. Focus should be put on collecting various data related to restoration area, such as natural geographic elements, animal and plant resources, human activities, climate and hydrology.
 - b. Identification of pressure factors. The pressure factors faced by wetlands should be identified, and necessary measures and technologies to address these problems should be determined, which include both direct and indirect human activities and natural causes such as the rise of sea level, climate change, and invasion of alien species.
 - c. Restoration goal setting. Small wetlands are different from large wetlands in that they usually have relatively single functions. For specific design and implementation of small wetland conservation and restoration, it should be based on the dominant functions, with more clearer restoration goals and targeted technology.
 - d. Restoration approach selection. Corresponding approaches shall be taken to eliminate and reduce the pressure factors that restrict the performance of the dominant functions, in terms of hydrology, habitat, biology, landscape, etc.
 - e. Environmental impact assessment and control. Generally, the impact assessment includes two parts: during the construction period and during the operation period of wetland restoration projects, covering the area within and around the site. In response to the problems raised after the environmental impact assessment, effective measures must be proposed to mitigate and control the impact.
 - f. Monitoring and evaluation. It's required to record and report the project status and internal and external factors that affect its progress in a timely, continuous and systematic manner during the whole process of project implementation, and focus on the results of restoration actions to evaluate whether the restoration project has achieved the expected goals.
 - g. Later-period management. Decision makers can preserve wetlands based on the monitoring results of restoration effects and formulate short-term and/or long-term wetland management plans.




















3. Models and key points of small wetlands restoration are as follows:
- a. Nature conservation-dominant small wetlands. The main function is to protect the existing ecological functions, targeting at small wetlands with important ecological function values and good ecological conditions. The main approach would be protection and conservation, primarily by preventive measures, with the focus on protecting the current situation, avoiding human disturbance, and ensuring that water quality, water volume, animals and plants, topography and landforms will not undergo major changes, while following the principle of not affecting the existing ecological structure and environment. They could be seasonal wetlands.
 - b. Landscape construction-dominant small wetlands. The main objects are urban landscape water bodies or small wetlands with landscape ornamental values as the main function, mainly in living areas for landscape and living environment improvement and residents' leisure activities. For their restoration, consideration should be given in terms of ecological landscape, vegetation restoration, water volume and quality, and some special requirements (such as special habitat creation), etc., to water system configuration and water circulation, water bank restoration, suitable plant selection, and building matched design and so on, to meet different needs of ecology, safety and aesthetics.
 - c. Water quality purification-dominant small wetlands. They are mainly intensive, flexible, beautiful and low-cost small wetlands that are made mainly to bring into full play the wetland purification capacity and reduce the domestic sewage, farmland tail water, livestock and poultry wastewater, tail water of sewage treatment plant and other different types of pollutants. With the core goals of pollution degradation and water purification, they try to achieve unpowered self-flow, and build up harmonious relationship among wetlands, people and surrounding environment.
 - d. Habitat restoration-dominant small wetlands. With the main function of providing wildlife habitats, to conserve and restore regional biodiversity, it is necessary to targeted restoration measures should be implemented to meet the habitat requirements of different wildlife including birds (such as waders and swimming birds), amphibious reptiles (such as frogs), fish, and insects (such as fireflies and dragonflies), through returning ponds to wetlands, water bank restoration, ecological island construction, vegetation restoration, etc. They could be seasonal wetlands.
 - e. Cultural display-dominant small wetlands. The main function includes cultural preservation, scientific knowledge promotion and eco-environment education. Through in-depth exploration of local social and human resources related to wetlands, combined with small wetlands conservation and habitat creation, important science education environment can be cultivated.
 - f. Storage- and regulation- dominant small wetlands. The main function includes storage regulation, water source supplement, local microclimate regulation and carbon dioxide fixation. Mainly through water system reorganization, vegetation restoration, water bank restoration, ecological landscape restorations, the hydrological water system of small wetlands is improved and the stability of wetland vegetation communities is ensured. They could be seasonal wetlands.
 - g. Biological resource utilization- dominant small wetlands. The main function is to provide abundant animal and plant products. Usually based on the cultivation of aquatic economic plants and the breeding of aquatic economic animals, activities are carried out to rationally utilize wetland biological resources, such as ecological stocking of aquatic economic animals, ecological planting of aquatic vegetables and other wetland economic plants, so as to optimize the rural industrial structure and integrate residents' life, production and ecology.

- h. Multifunctional small wetlands. Small wetland complex is composed of a number of multifunctional small wetlands, connected by water systems, close in space, and located in the same ecological environment. Through micro-topography reconstruction, water space restoration, vegetation restoration, water system reorganization, etc., it's necessary to coordinate the relationship between their sub-systems, take into consideration of the integrity of small wetland ecosystem, and fully combine their connection in space, water system and other aspects, so as to avoid habitat fragmentation and give full play to ecological functions.

Management

1. After the identification of small wetlands, important small wetlands and general small wetlands are included in wetland conservation systems. For those that are not identified, they can be included in the wetland resource pool to compensate for lost wetlands.
2. It's necessary to carry out small wetland resource investigation and establish a database and geographic information system that include all investigation factors, encourage scientific research institutions, individuals and various stakeholders to independently or cooperatively carry out scientific research projects on small wetlands.
3. In urban areas, small wetlands should be protected and restored as urban green infrastructure; in rural areas, based on small wetland space and the interlinked river and lake system, the practice of wetland village can be explored to achieve the integrated development of rural production, livelihood and ecology.
4. Community co-management mechanism shall be explored to coordinate the relationship between the development of surrounding communities and the conservation of small wetlands. For eco-tourism, community development and co-management activities, the management department should raise funds through joint ventures and cooperation, with a conservation plan formulated beforehand, in order not to damage the structure and function of small wetland ecosystems.
5. For those who legally occupy and utilize small wetlands, an ecological compensation mechanism shall be established, based on the principle of "those who utilize should protect and who benefit from them should compensate". Measures to protect small wetlands could be compensated or rewarded.
6. Science education on protecting small wetlands shall be strengthened. Especially on festivals as World Wetlands Day and World Environment Day, it's necessary to raise public awareness on small wetland conservation, via TV, radio, newspapers and the Internet, through documentaries, public service advertisements and forums, etc. and carry out programs in local wetland educational centers.
7. Management departments shall supervise and inspect small wetland conservation and restoration projects from time to time, organize technical personnel to monitor and evaluate regularly, and stop and address any violation of laws and regulations timely.

Table 1 Small wetland classification system and color code

1-level	Code	2-level	Code	3-level	Color Style	Color Value
natural small wetland	NSW I	Small offshore and coastal wetland	NSW I 1	small coastal saltwater lake		C100M100Y58K14
			NSW I 2	small coastal freshwater lake		C92 M98 Y19
	NSW II	Small marsh wetland	NSW II 1	small sphagnopratum		C65 M39 Y76
			NSW II 2	small herbaceous marsh		C80 M58 Y70 K19
			NSW II 3	small shrub marsh		C83 M53 Y100 K22
			NSW II 4	small forest marsh		C72 M4 Y58
			NSW II 5	small inland salt marsh		C60 Y54
			NSW II 6	small seasonal marsh		C51 Y56
			NSW II 7	small marsh meadow		C29 Y26
			NSW II 8	small geothermal wetland		C60 Y100
			NSW II 9	small freshwater spring/oasis wetland		C39 Y93
	NSW III	Small river wetland	NSW III 1	small permanent river		C68 M56
			NSW III 2	small seasonal or intermittent river		C38 M27
			NSW III 3	small stream		C95 M81
	NSW IV	Small lake wetland	NSW IV 1	small permanent freshwater lake		C65 M72
			NSW IV 2	small permanent saltwater lake		C43 Y7
			NSW IV 3	small permanent inland salt lake		C28 M6
			NSW IV 4	small seasonal freshwater lake		C45 Y18
			NSW IV 5	small seasonal saltwater lake		C21 Y8

















artificial small wetland	ASW I	small wetland for agriculture	ASW I 1	small irrigation ditch or canal		C29 M53 Y81
			ASW I 2	small paddy field/flooded paddy field		C4 M21 Y72
			ASW I 3	aquatic vegetable field		C11 M27 Y40
			ASW I 4	small salt field		C14 M5 Y48
			ASW I 5	agricultural pond		C17 Y84
	ASW II	small wetland for water conservancy	ASW II 1	small reservoir (pool)		C19 Y72
			ASW II 2	small canal, water conveyance river		C84 M100 Y53 K12
	ASW III	small wetland for aquaculture	ASW III 1	small freshwater aquaculture		C64 M21
			ASW III 2	small seawater aquaculture		C37 M55
	ASW IV	small wetland for landscape entertainment	ASW IV 1	landscape water body		C17 M30
	ASW V	small wetland for ecological purification	ASW V 1	rainwater wetland (rainwater garden)		C21 M65 Y9
			ASW V 2	artificial wetland for intensified purification of farmland tail water		C8 M63
			ASW V 3	artificial wetland for intensified purification of livestock and poultry breeding tail water		M66 Y22
			ASW V 4	artificial wetland for intensified purification of domestic sewage		M67 Y63
			ASW V 5	artificial wetland for intensified purification of sewage treatment plants		C50 M80 Y50
	ASW VI	small wetland waterlogged after excavation	ASW VI 1	small wetland waterlogged after mining excavation and subsidence		C53 M87 Y78

Table 2 Small wetland investigation content

No.	Investigation Content	Description
1	Name of investigated patch	Name based on the existing name of wetland patch or nearby natural features and residential areas on the topographic map
2	No. of investigated patch	Fill in according to the order of wetland patches in the wetland area
3	Name of wetland area	Fill in according to the existing name of wetland area
4	Code of wetland area	Fill in according to relevant regulations of wetland coding
5	Wetland type	Fill in according to the requirements of small wetland classification
6	Wetland area (hm ²)	Directly fill in the area data of wetland patches interpreted by RS images
7	Wetland distribution (administrative area, center coordinate)	Fill in both administrative area and center coordinate
8	Average elevation (m)	Fill in the average elevation of the wetland patch
9	Watershed	According to the classification of the first, second, and third-level watersheds across the country, fill in to the third-level watershed
10	River wetland	Fill in the level of river
11	Vegetation type and area (hm ²)	Mainly based on RS interpretation, in combination with field investigation and verification
12	Water supply situation	Fill in according to the five types of surface runoff recharge, atmospheric precipitation recharge, groundwater recharge, artificial recharge, and comprehensive recharge (subject to the dominant type, if two or more recharge types exist at the same time and difficult to distinguish between the primary and secondary recharges, fill in "comprehensive recharge")
13	Land ownership	State, collective or private ownership
14	Main dominant plant species	Fill in the main dominant plant species found in the field
15	Wetland patch zoning factor	Mainly based on wetland type, supplemented by dominant utilization methods
16	Conservation management status	Include the conservation and management measures taken, whether it belongs to nature reserves, nature conservation areas, or wetland parks
17	Wetland utilization status	Classify according to the utilization of wetlands, and fill in the dominant use
18	Surrounding land use status	Main types of land use within 100m of small wetlands
19	Natural environment elements*	Include shape, landform, climate, soil, sediment depth, base condition, shadow ratio
20	Wetland water environment elements*	Include hydrology, surface water quality, and groundwater quality.
21	Wetland wildlife *	Focus on investigating the types, distribution and habitat conditions of important aquatic invertebrates (including shellfish, shrimp, and crabs) in small wetland patches; types, distribution and habitat conditions of amphibians and waterbirds; animals, reptiles and fishes with dominance or with

		large numbers in small wetlands
22	Wetland insects*	Focus on investigating the types, distribution and habitat conditions of water beetles and dragonflies in small wetlands
23	Wetland plants*	Focus on investigating the types and distribution of aquatic vascular plants

Note: No. 1-18 are the contents of general small wetland investigation, No. 19-23 are for the additional ones for key small wetlands investigation.