Principles for the planning and management of urban and peri-urban wetlands

(Resolution XI.11, 2012-11-02)

Contents

1. Background

1. The Ramsar Convention's 10th meeting of the Conference of the Contracting Parties (COP10) in 2008 adopted Resolution X.27 on *Wetlands and urbanization*, which recognized that wetlands in urban and peri-urban areas can provide a range of important ecosystem services – benefits to people – but also that in many countries wetlands are increasingly becoming degraded as a result of spreading urbanization.

2. The following principles for the planning and management of urban and peri-urban wetlands have been prepared jointly by the Scientific & Technical Review Panel (STRP), UN-Habitat (the United Nations Human Settlements Programme), and other stakeholders, including Ramsar's International Organization Partners and the Secretariat of the Convention on Biological Diversity in relation to the Global Partnership on Cities and Biodiversity. This effort has been the first step in responding to the request in Resolution X.27 for guidelines for managing urban and peri-urban wetlands in accordance with an ecosystem approach, taking into account such issues as climate change, ecosystem services, food production, human health, and livelihoods. These principles are intended to provide a framework for general guidance, as is outlined in Figure 1 and Section 4 below, and are not legally binding.

3. The work of preparing these principles formed part of the first phase of a developing and ongoing collaboration between the Ramsar Convention and UN-Habitat, in joint recognition of the importance of encouraging society to adopt a more sustainable approach to urbanization, one which recognizes the need to protect the natural resource base that sustains urban areas.

4. Further background to the issues addressed in the principles for wetland wise use in an increasingly urbanized world, and the importance of maintaining urban and peri-urban

wetlands for the services they provide and the contribution they make to human well-being, is provided in COP11 DOC. 23.

5. At the 43rd meeting of the Ramsar Standing Committee, it was observed that the Principles as set out in Section 3 below can also be applied more broadly to land use (spatial) planning and management for wetlands in rural environments.

2. Objectives and audiences of the principles

6. Traditionally, biodiversity conservation and ecosystem management have been viewed as the domain and responsibility of national governments, with little attention or focus on the level of local government. More recently, however, it has been recognized that the role of local governance is increasingly relevant and important, especially in light of rapid urbanization.

7. Guidance on managing wetlands and their biodiversity in urban and peri-urban areas should demonstrate how existing 'tools' (or policies) can be applied most effectively before developing new or original tools/policies.

8. To facilitate this process it is important that there should be a convergence in understanding among urban planners and managers and wetland conservation and management experts. A key step is the development of general principles which speak to both audiences and can be used to guide the development of policy and the implementation of practical tools.

9. Because these principles have been developed jointly with UN-Habitat and other stakeholders, they reflect the collective philosophies of several organizations and are addressed to a range of audiences.

10. Whilst many issues related to urbanization and wetlands are universal, there is also a need to recognize distinctions between the developed and developing world and between different national and local stakeholders.

11. Thus, the initial focus audience must be all levels of government, but particularly local, which are responsible for urban development in the developing world, in order to enhance their recognition of the ways in which maintaining wetlands can contribute to achieving the Millennium Development Goals (see, e.g., Resolution XI.12 Annex 1, on wetlands and health). Then, through national policies, the principles need both to be cascaded down to regional and local planning and development levels and to be transmitted laterally to other ministries with environment management and planning responsibilities for urban areas.

12. In addition, there is also a need to ensure that international organizations are kept informed, including *inter alia* UN-Habitat, the CBD, and ICLEI – Local Governments for Sustainability. Similarly, information must be disseminated to those such as wetland managers who are directly involved in the management and wise use of wetlands in urban and peri-urban areas.

13. These principles provide just a first step in laying the foundation for the subsequent development of practical implementation guidance on urban development and wetland

management, for both the wetland management and the urban planning and development communities (see Figure 1).

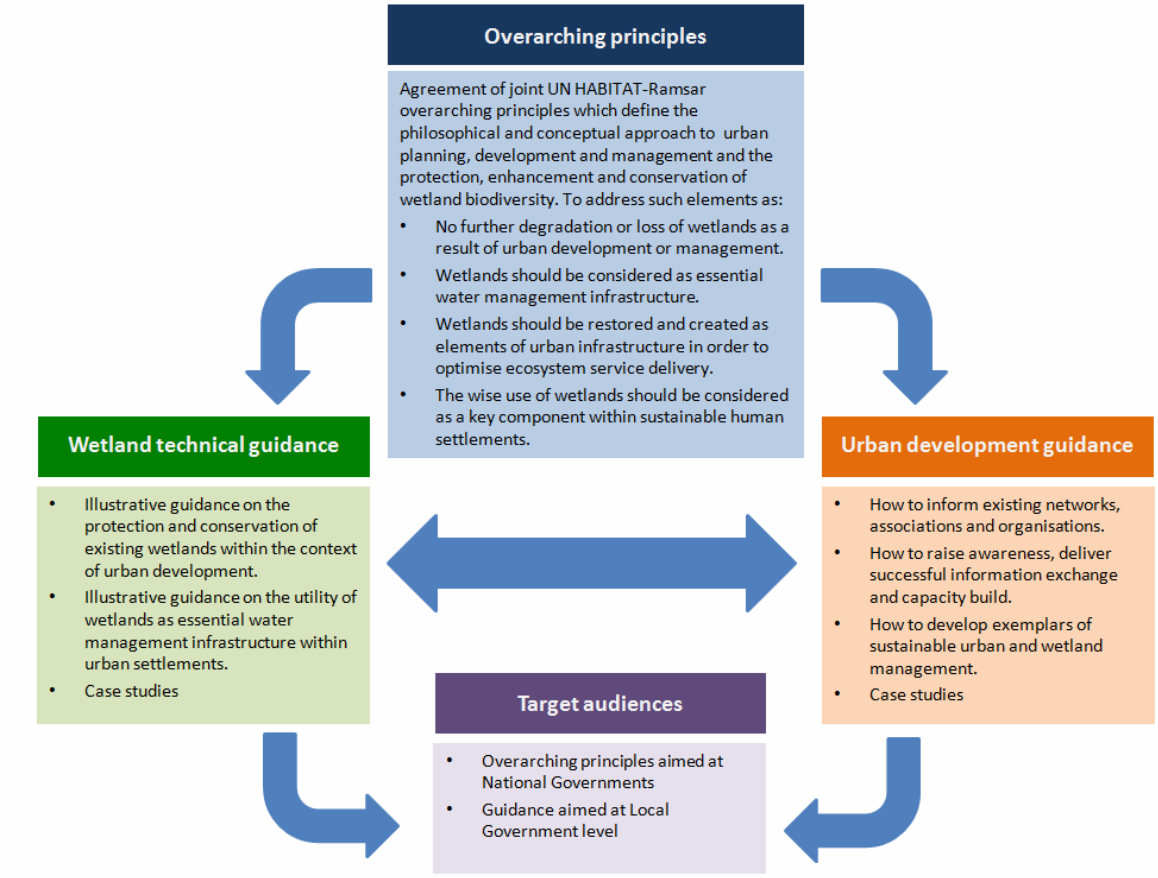

Figure 1. The relationship between the overarching principles and the development of practical guidance for different target audiences

3. Principles for the planning and management of urban and peri-urban wetlands

14. The principles set out below cover both policy and implementation practice levels of consideration. The key issues that have been identified concerning wetlands and urbanization, which have formed the basis for the preparation of the principles, are listed in the appendix.

3.1 Policy principles

15. The following four policy recommendations represent headline messages which governments, from national to local need to consider and implement when developing policies that jointly address urban planning and management and the wise use of wetlands:

Policy principle 1: **Wetlands and the range of services they provide are essential elements of the supporting infrastructure of urban and peri-urban settlements.**

Policy principle 2: **The wise use of wetlands contributes to socially and environmentally sustainable urban and peri-urban areas.**

Policy principle 3: **Any further degradation or loss of wetlands as a result of urban development or management should be avoided, and where not possible, any impacts should be mitigated, and any residual effects appropriately compensated for by offsets such as wetland restoration.**

Policy principle 4: **The full participation of indigeneous and local communities, municipalities and government sectors involved in urban and peri-urban spatial planning and wetland management decision making is vital to creating sustainable urban and peri-urban settlements.**

Policy principle 5**: The threat of natural calamities and human-made disasters and their impacts on urban populations and wetlands requires government priority and convergent actions to enhance resilience to disasters**.

3.2 Practical principles

16. The implementation of the policy principles should catalyze a range of practical measures which together will deliver more sustainable urban development in combination with better maintenance and enhancement of wetlands. The following practical, or best-practice, principles are recommended:

Practical principle 1: Wetland conservation

i) Urban development should avoid, whenever possible, destroying wetlands.

Practical principle 2: **Wetland restoration and creation**

i) Wetlands should be restored and/or created as elements of urban and especially water management infrastructure in order to maintain or enhance ecological character and optimize ecosystem service delivery.
ii) Opportunities to restore wetlands should be prioritized ahead of the creation of new wetlands. The creation of wetlands should be encouraged according to the regulations of each Contracting Party and established only in cases where other alternatives do not exist and related to economic and social projects, taking ecosystem services into consideration.

Practical principle 3: **Understanding the value of wetlands**

i) Opportunities to reduce urban poverty through the optimization of sustainably utilised wetland ecosystem services, in accordance with the wise use principles, should be pursued urgently.
ii) Trade-offs in terms of livelihood options and economic benefit-sharing, involving both the market and the state, need to be considered.
iii) Incentive systems such as payment for environmental services should be applied within and beyond urban environments to protect wetlands.
iv) The values of wetlands need to be articulated clearly for urban planners to inform their decision making. The costs of wetland loss and degradation should be made explicit within urban development.

Practical principle 4: **Stakeholder engagement**

i) Urban development and wetland management should adopt the principles of inclusivity, empowerment, and participation of indigenous and local communities.
ii) Governance of urban development and wetland management should be participatory, with all relevant stakeholders, and decentralized to the lowest appropriate level.

Practical principle 5: **Integrated planning**

i) Thematic planning should be used as an essential tool to safeguard wetlands and their ecosystem services both within and beyond urban settlements.
ii) The consideration of wetlands within urban planning needs to be integrated fully with wider elements of spatial planning (such as Integrated River Basin Management as adopted under Resolution X.19, water resource management, the development of transport infrastructure, agriculture production, fuel supply, etc.).
iii) Alternative locations need to be identified for planned urban developments (both formal and informal built development) which do not lead to wetlands, or other natural ecosystems, being degraded or lost.

4. Opportunities and priorities for the future development and integration of guidance for the planning and management of urban and peri-urban wetlands

4.1 Immediate priorities

17. In the short term there is the need to ensure that the principles set out in Section 3 above are disseminated and embedded widely. To achieve this, there must be ongoing and proactive collaboration with a range of stakeholders and organizations. Given limited resources, it is essential that priorities be established – the following represent the key primary targets for immediate integration and collaboration:

i) ***The Global Partnership on Cities and Biodiversity***. The Global Partnership on Cities and Biodiversity is facilitated by the CBD Secretariat in partnership with UNEP, UN-Habitat, ICLEI, IUCN Countdown 2010, UNITAR, UNESCO and a Steering Group of Mayors from Curitiba, Montreal, Bonn, Nagoya and Johannesburg, in order to bring together existing initiatives on cities and biodiversity. The aim of the Partnership is to engage cities in the fight to reverse the loss of biodiversity by 2010, and it assists national and local governments by providing awareness-raising material, organizing workshops and trainings, developing tools, and involving cities in international meetings on biodiversity.

ii) ***The UN-Habitat Urban Planning and Design Branch.*** The UN-Habitat Urban Planning and Design Branch supports spatial planning at the scales of the metropolitan region, city and neighbourhood, as well as through the entry point of climate change. It works at the international scale to mainstream the urban agenda into Multilateral Environmental Agreements and at the local scale to mainstream environmental considerations into urban planning.

iii) ***Local Action for Biodiversity (LAB) - ICLEI***. LAB is a global urban biodiversity programme coordinated by ICLEI – Local Governments for Sustainability. The LAB Pioneer WorkNet began in 2006 with a select group of local and regional authorities from around the world, representing over 54 million citizens. Referred to

as the 'LAB Pioneers', these local authorities are currently international leaders in managing and conserving biodiversity at the local level.

18. Through these networks and organizations there is the potential to embed the principles across a range of parallel initiatives and ensure that the wise use of wetlands is considered appropriately within urban planning and development. In particular, there is an immediate opportunity to integrate wetland guidance within the existing and successful framework of the UN-Habitat Urban Development and Planning Branch.

4.2 Longer-term priorities

19. Integration within the three programmes identified above will mark the beginning of a process and not the end. Future proactive engagement by the bodies of the Ramsar Convention is required to ensure that these principles are being applied and implemented. Similarly, as advances are made on wider wetland guidance on, for example, human health (see Resolution XI.12) and poverty eradication (Resolution XI.13), it will be necessary to integrate these developing work areas within broader urbanization agendas.

20. To ensure that wetlands are given the consideration they deserve, and that these principles and any subsequent guidance material are truly integrated into urban planning and management, there needs to be an ongoing commitment. The social and environmental science surrounding urban settlements is evolving rapidly and opportunities for information gathering and dissemination are legion.

4.3 Potential future products

21. The process of developing the principles has drawn attention to the desirability of a range of further products, and the principles themselves provide the basis for policy development. The following two products have been identified:

    i) information for local authorities, planning departments, and municipal authorities on wetlands and urban planning and management; and
    ii) information for local wetland managers on urbanization and wetland planning and management.

22. Cities are dynamic entities. Decisions can often be implemented at a city level which in turn can act as catalysts for broader adoption at a national level. In recognition of this, the city-level audience must be targeted in a concerted manner. Information and practical guidance for local and municipal officials and planning department authorities is required across a range of wetland-related issues including:

    - awareness raising and Communication, Education, Participation, and Awareness (CEPA);
    - mapping (wetland types and classification);
    - understanding and evaluating wetland values and ecosystem services;
    - identifying and mitigating threats and impacts, including in relation to a changing climate;
    - recognizing wetland restoration and creation as solution providers;
    - building capacity across wetland-related disciplines; and

- undertaking strategic environmental assessment.

23. Additionally, targeted guidance is needed for a range of stakeholders, including indigenous peoples and local communities, elected members of local government, the private sector (to facilitate trade in ecosystem services, industry, and housing), and non-governmental organizations.

24. Wetland managers also form a distinct audience. Whilst a profile of wetland managers in relation to urbanization is not yet clear, they will undoubtedly form a distinct and important audience for specific guidance.

Appendix

Key issues and potential solutions for future sustainable urban and wetland management and planning

The principles articulated above are intended to cover the **key issues facing wetlands from the pressures associated with urbanization**. The key issues and drivers of wetland loss and degradation within and beyond urban areas which underpin the principles can be identified here:

i) Sectoral conflicts across government departments (both horizontally and vertically) and the scarcity or absence of joined-up planning and coordination often fail to integrate wetlands appropriately in decision-making processes.

ii) Leaving urban land use and land allocation decisions to market forces or to the customary and informal delivery systems is not a sustainable policy option and will result in continued wetland loss and degradation.

iii) There is widespread lack of awareness about the economic and social value of wetlands and the ecosystem services they provide, both directly and in maintaining water resources upon which urban populations depend.

iv) Lack of leadership and poor and inequitable governance is a persistent problem.

v) There is a general lack of policies and laws to protect wetlands as well as a lack of regulatory mechanisms to enforce them.

vi) Lack of infrastructure and financial and human resources inhibit the sustainable planning and management of urban and peri-urban wetlands.

vii) Often there is a weak definition or understanding even of what a "wetland" is. This can be compounded by the lack of a wetland inventory to inform the urban planning process.

viii) Populations and population density are increasing, often driven by rural poverty forcing migration to urban centres.

ix) Climate change is a direct driver of change but also causes increasing numbers of environmental refugees to migrate to urban centres, compounding population pressures there.

x) Poor equity of access to the benefits derived from wetland ecosystem services and endemic urban poverty can result in the over-exploitation of wetlands out of economic necessity.

xi) Unsustainable development with poorly considered and located formal and informal settlements, illegal buildings and, especially in proximity to the coast, activities such as dumping of waste, contribute to wetland loss and degradation.

xii) Lack of urban waste water and sewage treatment results in pollution of wetlands directly and impacts to the aquatic environment. In addition, polluted run-off from agro-chemicals and industrial waste can also impact upon wetlands.

xiii) Pressures on water resources for human and industrial consumption can result in water scarcity and security issues both within and beyond urban areas.

xiv) Wetlands are still often associated with diseases such as malaria, sometimes leading to their drainage and infilling, and there must be a greater recognition that healthy wetlands often enhance people's health and livelihoods.

xv) Inappropriate wetland management has contributed to reducing the resilience of cities to disasters and further reducing their ability to recover from disasters.

xvi) Extraction of geological materials beyond municipal boundaries for both building and development and to support urban populations, such as sand, salt and minerals, must be managed carefully.

xvii) Over-exploitation of wetland resources and the accelerated introduction of alien species, both accidental and deliberate, often cause loss of habitat, decline of indigenous biota, and degradation of ecosystems and the services that they provide.

To overcome these key considerations, a range of **potential solutions** can be identified, which inform the principles provided above. These are:

i) raising the level of understanding of the broad utility of wetlands, as this is not fully appreciated by a considerable proportion of the planning and other sectors;

ii) improving awareness of the benefits wetlands deliver at different levels, including teaching programmes at universities, wider public awareness campaigns, and provision of targeted information across government departments;

iii) achieving more sensitive urban planning policy development, including development frameworks and spatial zonation to protect ecosystem services (especially those of wetlands), and addressing water management issues at the appropriate scale;

iv) increasing the focus by governments on conserving wetland areas and, if necessary, paying people to move to other, less sensitive areas, e.g., through systems that provide payments for ecosystem services;

v) explicitly including wetlands as natural infrastructure in urban planning, including in landscape planning and all aspects of water management, such as storm water management, water resources and water treatment;

vi) treating wetlands not merely as areas that are important for nature conservation *per se* but as key elements within urban water management infrastructure and essential components in providing water resources;

vii) enhancing policy and legal frameworks protecting wetlands, and ensuring that they are enforced and regulated;

viii) using selected wetlands as natural waste-water treatment systems to mitigate urban pollution and sedimentation, particularly in improving sanitation within the limits imposed by their capacity to provide these services and without significantly compromising their ability to continue providing other ecosystem services and as long as this does not have significant adverse effects on the environment;

ix) considering the wise use of wetlands both within and beyond urban boundaries and understanding the interconnectivity of catchment/ watershed-scale issues including to guarantee environmental flows to wetlands;

x) ensuring appropriate stakeholder participation and empowerment, in both problem setting and problem solving, which can be an essential element in delivering sustainable cities – despite being essential to future successes, such engagement is currently deficient; and

xi) developing specific programmes aimed at benefiting and involving indigenous communities in sustainable wetland management.