



## 9th Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)

*“Wetlands and water: supporting life, sustaining livelihoods”*

Kampala, Uganda, 8-15 November 2005

### Resolution IX.1 Annex A

## A Conceptual Framework for the wise use of wetlands and the maintenance of their ecological character

### Introduction

1. Definitions of the key Ramsar Convention concepts of “wise use” and “ecological character” of wetlands were adopted by COP3 (1987) and COP7 (1999) respectively. Action 3.1.1 of the Ramsar Strategic Plan 2003-2008 requested the Convention’s Scientific and Technical Review Panel (STRP) to “review the wise use concept, its applicability, and its consistency with the objectives of sustainable development”.
2. In addition, COP8 Resolution VIII.7 requested the STRP to further review and, as appropriate, develop guidance and report to COP9 concerning identified gaps and disharmonies in defining and reporting the ecological character of wetlands, including, inter alia, harmonization of definitions and terms in the guidance on inventory, assessment, monitoring and management of the ecological character of wetlands.
3. The work of the STRP has been greatly assisted by the concurrent work of the Millennium Ecosystem Assessment (MA), in particular the MA’s Conceptual Framework for Ecosystems and Human Well-being (Millennium Ecosystem Assessment 2003. *Ecosystems and Human Well-being: A Framework for Assessment*. Island Press, Washington, D.C.), and its definition and description of the characteristics of ecosystems and ecosystem services.
4. The STRP determined that it is appropriate to update and harmonize the Convention’s “wise use” and “ecological character” definitions to take into account other now more-widely used terms and definitions relating to ecosystems and sustainable development, and that a conceptual framework for the delivery of “wise use” would be of assistance to Contracting Parties and others in determining when and where to make policy and management interventions to support this delivery.
5. This guidance covers harmonizing wetland ecosystem terminologies and provides both a conceptual framework for wetland wise use and updated and harmonized definitions of “ecological character”, “change in ecological character”, and the “wise use” of wetlands.

### Wetland ecosystem terminology

6. Within the Millennium Ecosystem Assessment (MA), ecosystems are described as the complex of living communities (including human communities) and non-living

environment (Ecosystem Components) interacting (through Ecological Processes) as a functional unit which provides *inter alia* a variety of benefits to people (Ecosystem Services).

7. Included in “MA Ecosystem Services” are provisioning, regulating, and cultural services that directly affect people, and supporting services which are needed to maintain these other services. Further information can be found in the Synthesis Report prepared by the MA for the Ramsar Convention (Finlayson, C.M., D’Cruz, R. & Davidson, N.C. 2005. *Wetlands and water: ecosystem services and human well-being*. World Resources Institute, Washington D.C). In the context of the Ramsar Convention this refers to products, functions and attributes as defined in Resolution VI.1 and expanded to include both material and non-material cultural values, benefits and functions as outlined in COP8 DOC.15 “Cultural aspects of wetlands”.
8. Terms currently used in previous Ramsar guidelines and documents are shown in Table 1 alongside those used in the MA. Further review of the harmonization of definitions and terms related to ecosystem benefits/services (with reference to Resolution VIII.7 (paragraph 15) and COP9 DOC. 16, taking into account the usage of such terms in other international fora) is needed by the STRP, to be reported to COP10.

**Table 1. Comparative terminology for describing wetland ecosystems**

<b>MA Ecosystem terms</b>	<b>Ramsar terms</b>
Ecosystem Components: physical; chemical; biological (habitats, species, genes)	“components”, “features”, “attributes”, “properties”
Ecological Processes within and between ecosystems	“processes”, “interactions”, “properties”; “functions”
Ecosystem Services: provisioning; regulating; cultural; supporting	“services”, “benefits”, “values”, “functions”, “goods”, “products”

### **A Conceptual Framework for wetland wise use**

9. The Conceptual Framework developed by the Millennium Ecosystem Assessment (MA) for the maintenance of ecosystem services for human well-being and poverty reduction provides a multi-scalar approach which indicates how and where policy and management interventions and decision-making can be made (Figure 1). Under the MA framework, “wise use” equates to the maintenance of ecosystem benefits/services to ensure long term maintenance of biodiversity as well as human well-being and poverty alleviation.

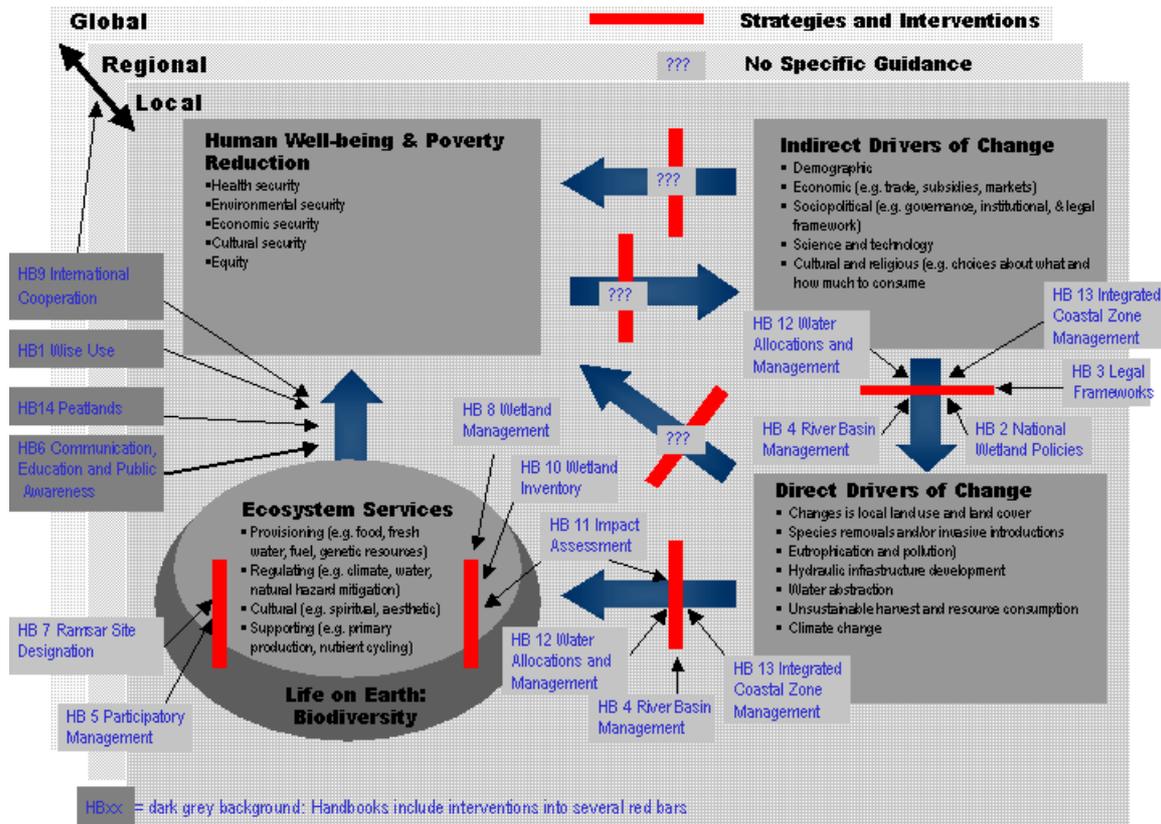


Figure 1. A Conceptual Framework for the Wise Use of Wetlands and the maintenance of their ecological character, and the application of the guidelines in the Ramsar ‘toolkit’ of Wise Use Handbooks 2nd edition (2004). (From the MA report to the Ramsar Convention: *Ecosystem Services and Human Well-Being: Wetlands & Water*. Synthesis. 2005. World Resources Institute, Washington D.C.)

10. Mapping the Ramsar Wise Use toolkit contents onto this conceptual framework also permits an assessment of the toolkit’s coverage and gaps in coverage in relation to intervention opportunities and topics. It should be noted that many of the current Ramsar wise use guidelines concern strategies and interventions to ecosystems and their processes, or strategies and interventions addressing aspects of the direct drivers of change to ecosystems. Also, these concern interventions chiefly at local or national levels, since Ramsar guidance is for Contracting Parties acting within their territories, although some guidance also applies regionally and globally (e.g., aspects of the Guidelines for International Cooperation – Handbook 9).
11. The strategies and intervention opportunities which are relevant for the application of each of the guidelines of the Ramsar toolkit are listed in Table 2.

Table 2. The application of guidelines in the Ramsar “Toolkit” of Wise Use Handbooks, supported by *Ramsar Technical Reports*, to different intervention opportunities in the MA’s Conceptual Framework (see Figure 1).

Intervention opportunity(ies)	Relevant Ramsar Wise Use Handbooks (2 <sup>nd</sup> edition), COP9 Resolutions and <i>Ramsar Technical Reports (RTR)</i>
<b>Indirect drivers → Direct drivers</b>	2. National Wetland Policies 3. Laws and Institutions 4. River Basin Management (some parts) 12. Water Allocation and Management (some parts) 13. Coastal Management (some parts) Resolution IX.1 Annex C. Water-related framework
<b>Direct drivers → Wetland Ecosystems</b>	4. River Basin Management 10. Wetland Inventory 11. Impact Assessment 12. Water Allocation and Management 13. Coastal Management Resolution IX.1 Annex C. Water-related framework Resolution IX.1 Annex C i. RBM “critical path” Resolution IX.1 Annex C ii. Groundwater RTR. Environmental water requirements RTR. Economic valuation of wetlands RTR. Vulnerability Assessment
<b>Within Wetland Ecosystems</b>	5. Participatory Management 7. Designating Ramsar Sites 8. Managing Wetlands 10. Wetland Inventory 11. Impact Assessment 12. Water Allocation and Management Resolution IX.1 Annex C i. RBM “critical path” Resolution IX.1 Annex C ii. Groundwater Resolution IX.1 Annex E. inventory/assessment /monitoring framework Resolution IX.1 Annex E i. Rapid assessment RTR. Vulnerability Assessment RTR. GIS for inventory, assessment & monitoring
<b>Covers several types of intervention opportunities</b> (Indirect drivers → Direct drivers, Direct drivers → Wetland Ecosystems, and within Wetland Ecosystems)	1. Wise Use of Wetlands 6. Wetland CEPA 9. International Cooperation 14. Peatlands Resolution IX.1 Annex D. Indicators of effectiveness

12. Only two current Ramsar wise use guidelines - National Wetland Policies and Reviewing Legislative and Institutional Frameworks - wholly concern interventions to indirect drivers

of change, although some other guidelines include some policy aspects. However, it is clear that these ‘interventions’ onto the indirect drivers of change are important to have in place if efforts to manage wetland ecosystems sustainably through the application of the rest of the suite of Ramsar wise use guidelines are to be effective and efficient. Without such a policy and legislative framework in place, there is a risk that other interventions will take place in a ‘political vacuum’ without a clear authorizing environment for their delivery, thus risking such efforts failing.

13. For some intervention opportunities indicated by the MA Conceptual Framework – for example, between indirect drivers of change and human well-being and vice versa - there are currently no Ramsar guidelines developed.
14. All aspects of the outline *Guidelines for the implementation of the wise use concept* adopted by COP4 (Recommendation 4.10) and most aspects of the *Additional guidance for the implementation of the wise use concept* adopted by COP5 (Resolution 5.6) have now been superseded by the suite of elaborated guidelines adopted by subsequent Conferences of Contracting Parties and compiled in the Ramsar toolkit of Wise Use Handbooks (see Table 2). However, three aspects of the COP5 guidance have not been further developed, those concerning “Research”, “Training” and “Technical issues” of sustainable technologies.

### Updated definitions of “ecological character” and “change in ecological character” of wetlands

15. Applying the MA’s terms and concepts, under which services form an integral part of ecosystems, an updated definition of Ramsar “ecological character” is:  
  
“Ecological character is the combination of the ecosystem components, processes and benefits<sup>1</sup>/services that characterise the wetland at a given point in time.”
16. The phrase “at a given point in time” refers to Resolution VI.1 paragraph 2.1, which states that “It is essential that the ecological character of a site be described by the Contracting Party concerned **at the time of designation for the Ramsar List**, by completion of the Information Sheet on Ramsar Wetlands (as adopted by Recommendation IV. 7).”
17. Furthermore, paragraph 2.3 of Resolution VI.1 states that “Contracting Parties are requested to verify the data which they have provided on Information Sheets on Ramsar Wetlands every six years, i.e., every second meeting of the Conference and to provide the [Secretariat] with updated sheets if necessary.” In addition, under paragraph 2.4 “Change in ecological character of a listed site should be assessed against the baseline status presented in the Information Sheet on Ramsar Wetlands, at the time of designation for the List (or at the time the Information Sheet was first provided to the [Secretariat]), together with any information which has been received subsequently.”
18. Essential to wetland management is baseline data that establishes the range of natural variation in components, processes and services at each site within a given time frame,

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<sup>1</sup> Within this context, ecosystem benefits are defined in accordance with the MA definition of ecosystem services as “the benefits that people receive from ecosystems”.

against which change can be assessed. Contracting Parties have already adopted a range of guidance relevant to the identification, assessment, monitoring and management of the ecological character of Wetlands of International Importance and other wetlands, including wetland risk assessment (Resolution VII.10), impact assessment (Resolutions VII.16 and VIII.9), monitoring (Resolution VI.1), inventory (Resolution VIII.6), and management planning (Resolution VIII.14). In addition, the STRP is committed to the future development of a hierarchical mechanism for describing the ecological character of wetlands.

19. Consistent with the updated definition of “ecological character”, an updated definition of “change in ecological character of wetlands” is:

“For the purposes of implementation of Article 3.2, change in ecological character is the human-induced adverse alteration of any ecosystem component, process, and/or ecosystem benefit/service.”

20. The inclusion of specific reference to Article 3.2 of the Convention text within the definition is designed to clarify the maintenance obligation for the ecological character of listed Wetlands of International Importance (Ramsar sites) under Article 3.2, and to note that such change concerns only adverse change caused by the actions of people. This is in line with the context of Article 3.2 and Recommendation 4.8 (1990) establishing the Montreux Record, which was re-affirmed by COP8 Resolution VIII.8. For the purposes under the Convention, this definition therefore excludes the processes of natural evolutionary change occurring in wetlands and also excludes positive human-induced change.

21. However, it should be noted that other actions adopted by the Convention, such as those concerning assessing the overall status and trends of wetlands and Ramsar sites, require information on all types of change in ecological character – positive and negative, natural and human-induced (as is recognized in COP8 DOC. 20 and by Resolution VIII.8). Likewise, the Ramsar Convention has also recognized that wetland restoration and/or rehabilitation programmes can lead to favourable human-induced changes in ecological character (Annex to Resolution VI.1, 1996) and are a key aspect of wetland management interventions (see, e.g., Annex to Resolution VIII.14).

### **An updated definition of the “wise use” of wetlands**

22. An updated definition of “wise use”, taking into account the Convention’s mission statement, the MA’s terminology, the concepts of the ecosystem approach and sustainable use applied by the Convention on Biological Diversity, and the definition of sustainable development adopted by the 1987 Brundtland Commission, is:

“Wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches<sup>2</sup>, within the context of sustainable development<sup>3</sup>.”

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<sup>2</sup> Including *inter alia* the Convention on Biological Diversity’s “Ecosystem Approach” (CBD COP5 Decision V/6) and that applied by HELCOM and OSPAR (Declaration of the First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions, Bremen 25-26 June 2003).

23. The wise use provisions of the Convention apply, as far as possible, to all wetland ecosystems. Societal choice is inherent in advancing human well-being and poverty alleviation, which depends on the maintenance of ecosystem benefits/services. Pressures to follow sustainable development precepts, and to maintain environmental, economic and social sustainability in land use decisions, encourage compromises (“trade-offs”) between individual and collective interests.
24. Within the context of ecosystem approaches, planning processes for promoting the delivery of wetland ecosystem benefits/services should be formulated and implemented in the context of the maintenance or enhancement, as appropriate, of wetland ecological character at appropriate spatial and temporal scales.

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<sup>3</sup> The phrase “in the context of sustainable development” is intended to recognize that whilst some wetland development is inevitable and that many developments have important benefits to society, developments can be facilitated in sustainable ways by approaches elaborated under the Convention, and it is not appropriate to imply that ‘development’ is an objective for every wetland.