

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA

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Sixteenth meeting of the Conference of the Parties  
Bangkok (Thailand), 3-14 March 2013

CLIMATE CHANGE AND WETLANDS: IMPLICATIONS FOR  
THE RAMSAR CONVENTION ON WETLANDS

The attached documents have been submitted by the Secretariat at the request of the Ramsar Convention\* and in relation to agenda item 27 on *Climate change*.

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\* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*



CONVENTION ON WETLANDS  
CONVENTION SUR LES ZONES HUMIDES  
CONVENCIÓN SOBRE LOS HUMEDALES  
(Ramsar, Iran, 1971)

From the Secretary General

Gland, 22 November 2012  
Ref. ANT/mik

Dear Colleagues,

**Re.: Resolution XI.14**  
***Climate change and wetlands: implications for the Ramsar Convention on Wetlands***

The eleventh meeting of the Conference of the Contracting Parties to the Ramsar Convention adopted Resolution XI.14 on climate change and wetlands. This is the third time that the Conference of the Parties addresses this subject and positions wetlands and the services they provide, as well as the threats to their integrity, within the context of climate change and of mitigation strategies.

In accordance with paragraph 37 of Resolution XI.14, which “requests the Secretary General to bring this Resolution, in particular, to the attention of the Biodiversity Liaison Group (BLG), and INVITES the Executive Secretary of the CBD to bring this Resolution to the attention of the Joint Liaison Group (JLG)”, I have the honour of sending a copy of this decision for your consideration and for dissemination, as appropriate, within your respective constituencies.

I would be happy to answer any question and/or receive any suggestion regarding the implementation of this resolution.

Yours sincerely,

Anada Tiéga

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## 11<sup>th</sup> Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)

*“Wetlands: home and destination”*

Bucharest, Romania, 6-13 July 2012

### Resolution XI.14

#### Climate change and wetlands: implications for the Ramsar Convention on Wetlands

1. RECALLING that Resolution X.24 on *Climate change and wetlands* (2008), which updated and superseded Resolution VIII.3 on *Climate change and wetlands: impacts, adaptation and mitigation* (2002), recognized the potential implications of climate change for the conservation and wise use of wetlands and, among other things, called upon Contracting Parties to manage their wetlands in such a way as to increase their resilience to climate change and extreme weather events and to ensure that climate change responses would not lead to serious damage to the ecological character of wetlands, and RECOGNIZING the Ramsar Convention's role and mandate to address all issues affecting the maintenance of the ecological character of wetlands;
2. ALSO RECALLING that in its Third and Fourth Assessment Reports, the Intergovernmental Panel on Climate Change (IPCC) concluded that wetlands are amongst those natural systems especially vulnerable to climate change because of their limited adaptive capacity and that they may therefore undergo significant and irreversible damage, AWARE that the IPCC is presently conducting a Fifth Assessment Report to provide in 2013/2014 an update of knowledge on the scientific, technical and socio-economic aspects of climate change, and RECOGNIZING the role and mandate of the UNFCCC and the IPCC in this process;
3. AWARE that the IPCC is currently undertaking further work at the request of the Subsidiary Body for Scientific and Technical Advice (SBSTA) of the United Nations Framework Convention on Climate Change (UNFCCC), notably the preparation of the “2013 Supplement to the IPCC 2006 Guidelines on National Greenhouse Gas Inventories: Wetlands” ([www.ipcc.ch](http://www.ipcc.ch));
4. WELCOMING the significant progress made since Ramsar COP10 (2008) with respect to knowledge and awareness of the importance of the carbon sequestration and storage function of wetlands (including *inter alia* inland peatlands and coastal wetlands), including in the scientific understanding of greenhouse gas fluxes from wetlands and the drivers of greenhouse gas fluxes from land use, land use change, and forestry sources, through ‘wet carbon’ and ‘blue carbon’ assessments made by UNEP, the World Bank, IUCN, the Ramsar Convention (with the Danone Fund for Nature), Wetlands International, and

- others, and RECOGNIZING that the continuing degradation and loss of these wetlands releases large amounts of stored carbon;
5. RECALLING that the preambular text of the Convention affirms the determination of Parties to “stem the progressive encroachment on and loss of wetlands now and in the future”; NOTING that avoiding such loss and degradation has been reaffirmed in subsequent COP Resolutions as the primary option for delivering wetland conservation and wise use (as outlined in Resolution XI.9 on *An Integrated Framework for avoiding, mitigating and compensating for wetland losses*); and CONCERNED that, despite extensive research undertaken, the importance of wetlands in managing greenhouse gas emissions could be more widely recognized by international and national climate change response strategies and mechanisms, and could benefit from improved communication about the current and potential climate change mitigation provided by wetlands;
  6. AWARE of the adoption of a new voluntary accounting activity ‘Wetland Drainage and Rewetting’ for a second commitment period of the Kyoto Protocol by which Annex I Parties to the Kyoto Protocol can account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from wetland drainage and rewetting (UNFCCC Decision 2/CMP.7);
  7. AWARE of the Verified Carbon Standard (VCS) approved Peatland Rewetting and Conservation (PRC) under the VCS Agriculture, Forestry and Other Land Use (AFOLU) programme for crediting climate benefits from all wetland areas, including mangroves, freshwater tidal coastal wetlands, salt marshes, sea grasses, floodplains, peatlands and potentially other land areas;
  8. ALSO RECALLING that the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Resolution XI.8, Annex 2, Objective 4.1) encourages the use of Ramsar Sites and other natural wetlands as baseline and reference areas for monitoring to detect trends in climate change, among other things; RECOGNIZING the role that the designation and effective management of Ramsar Sites can play in adaptation and resilience to climate change; and AWARE that both forested and non-forested wetlands included in the Ramsar Classification System for Wetland Type play a role in carbon sequestration and storage;
  9. WELCOMING the continuing progress made by the Ramsar Convention, as outlined in Resolution XI.6 on *Partnerships and synergies with Multilateral Environmental Agreements and other institutions*, in expanding cooperation with other MEAs and other institutions, so that the expertise and advice available from the Ramsar Convention may be available to support all such other bodies in addressing issues affecting the conservation and wise use of wetlands;
  10. RECALLING the establishment by the Danone Group, IUCN, and the Ramsar Convention, at the 10<sup>th</sup> meeting of the Conference of the Contracting Parties (COP10), of the “Danone Fund for Nature” (DFN) initiative to develop a programme for restoring wetlands, especially mangroves, for carbon storage, and NOTING the progress made by this initiative since COP10, including the development of a methodology for the Clean Development Mechanism (CDM) under the UNFCCC for the “Afforestation and reforestation of degraded tidal forest habitats” (ARNM0038);

11. RECOGNIZING that wetlands, through their functions, deliver a wide range of ecosystem services that contribute to human well-being, and that some wetland types deliver services that are important for climate change adaptation and by acting as natural infrastructure to reduce risks from severe water-related events such as storms, flooding, drought, coastline erosion, and the intrusion of saltwater into freshwater systems;
12. AWARE that the continuing degradation and loss of some types of wetlands cause the release of large amounts of stored carbon and thus exacerbates climate change;
13. RECOGNIZING that scientific reports indicate that degradation and loss of many types of wetlands is occurring more rapidly than in other ecosystems and that climate change is likely to exacerbate this trend which will further reduce the mitigation and adaptation capacity of wetlands, and, since the conservation and wise use of wetlands have the potential to halt this degradation, the designation of Ramsar Sites, together with their effective management, as well as that of other wetlands, can in some regions play a vital role in carbon sequestration and storage and therefore in the mitigation of climate change;
14. NOTING the ongoing discussions on issues relating to reducing emissions from deforestation and forest degradation in developing countries and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries under the UNFCCC, and FURTHER NOTING the importance of those discussions in helping achieve the objectives of the Ramsar Convention, and ENCOURAGING Parties to promote the importance of wetlands in ongoing discussions on this issue;
15. AWARE that the Scientific and Technical Review Panel (STRP) has, at the request of the Contracting Parties in Resolution X.24, continued to address wetlands and climate change issues during the 2009-2012 triennium, including on:
  - i) methods for assessing the vulnerability of different wetland types to climate change;
  - ii) opportunities for adaptation to climate change;
  - iii) wetland restoration as a tool for climate responses;
  - iv) the role and importance of different wetland types in the global carbon cycle; and
  - v) recent key messages and recommendations concerning wetlands, water and climate change from relevant intergovernmental and international processes and initiatives;
16. THANKING the STRP for making much of this work available to the Parties and others through Ramsar Technical Reports and other documents, and AWARE that aspects of this work are ongoing;
17. RECALLING that the Key Messages of the Millennium Ecosystem Assessment *Wetlands and Water Synthesis Report*, and subsequent scientific reports, indicate that the degradation and loss of wetlands is occurring more rapidly than for other ecosystems, and that global climate change is likely to exacerbate the loss and degradation of many wetlands, thereby reducing the delivery of wetlands ecosystem services critical to adapting to and mitigating climate change;
18. RECOGNIZING that the conservation and wise use of wetlands helps biodiversity to adapt to climate change by providing connectivity, corridors and flyways, and other migratory pathways, along which biota can move, and AWARE of efforts by the

Convention on Migratory Species (CMS) to address these issues, including the adoption at its 10<sup>th</sup> Conference of the Parties (November 2011) of Resolution 10.19 on “Migratory species conservation in the light of climate change”, and the adoption by the 5<sup>th</sup> Meeting of Parties (MOP5) of the African-Eurasian Migratory Waterbird Agreement (AEWA) in May 2012 of Resolution 5.13 “Climate Change Adaptation Measures for Waterbirds”;

19. NOTING the preparation in 2009 by the Ad-Hoc Technical Expert Group on Climate Change and Biodiversity of the Convention on Biological Diversity (CBD) of a report containing advice on the incorporation of the conservation and sustainable use of biodiversity into climate change mitigation and adaptation activities, summarized in CBD Technical Series No. 41 on *Connecting biodiversity and climate change mitigation and adaptation*, and of the CBD Technical Series No. 59 report on *REDD-plus and Biodiversity* (2011);
20. WELCOMING decision X/33 of the 10<sup>th</sup> meeting of the Conference of the Parties to the CBD, on biodiversity and climate change, and in particular paras. 8(n), (s) and (t) that relate to wetlands and the Ramsar Convention;
21. FURTHER NOTING Target 15<sup>1</sup> of the Aichi Biodiversity Targets of the Strategic Plan for Biodiversity 2011-2020, adopted by the CBD in the annex to decision X/2, and RECOGNIZING that implementation of Strategies 1.4, 1.5 and 1.8 of the Ramsar Strategic Plan 2009-2015 will contribute towards the achievement of that target, as is indicated in Ramsar Resolution XI.3 on adjustments to the Ramsar Strategic Plan;
22. RECOGNIZING that wetlands provide several other services important for responding to climate change effects, such as the role of wetlands in regulating water cycles, thereby providing, for example, benefits in terms of coping with sea level rise, including coastal storm protection and the protection of surface and ground water from saltwater intrusion, and ALSO RECOGNIZING that methane and nitrous oxide, emitted as part of the nitrogen cycle during de-nitrification in wetlands, has been recognized by the UNFCCC as an important consideration for greenhouse gas fluxes regarding climate change mitigation;
23. REAFFIRMING that integrative policies and planning measures for the wise use of wetlands need to be encouraged in order to address the influence of global climate change on the interdependencies between wetlands, water management, agriculture, energy production, poverty reduction, and human health, and WELCOMING Ramsar Technical Report No. 6 on wetlands and human health interactions, as well as Resolution XI.12 on *Wetlands and health*, which further elaborate upon the many benefits that people obtain from healthy wetlands and the need to incorporate climate change adaptation approaches into efforts to alleviate poverty; and
24. CONCERNED that mechanisms may not be in place for determining specified limits of change in ecological character of wetlands, or adequate baselines or reference conditions available against which change can be assessed or for reporting under Article 3.2 of the Convention (see also COP11 DOC.24 concerning limits of acceptable change in the Ramsar context);

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<sup>1</sup> “By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.”

## THE CONFERENCE OF THE CONTRACTING PARTIES

25. ACKNOWLEDGES the distinct mandates and independent legal status of conventions and AFFIRMS that the UNFCCC and IPCC are the key references for the terms *mitigation*, *adaptation*, *carbon sequestration*, *greenhouse gas emissions* and *carbon storage* used in this Resolution, as they pertain to climate change;
26. URGES Contracting Parties to maintain or improve the ecological character of wetlands, including their ecosystem services, to enhance the resilience of wetlands as far as possible in the face of climate-driven ecological changes including, where necessary, to promote the restoration of degraded wetlands, and further to promote the ability of wetlands to contribute to nature-based climate change adaptation, particularly the roles of wetlands in regulating water, including reducing risks from water-related disasters, and to sequester and store carbon as important responses for climate change mitigation through the maintenance and enhancement of their ecological functions, and to reduce or halt the release of stored carbon that can result from the degradation and loss of wetlands;
27. URGES those Contracting Parties that are also Annex I Parties to the Kyoto Protocol to consider the wise use of wetlands in activities identified in paragraph 6 above for accounting of greenhouse gas emissions from wetlands under a second commitment period under the Kyoto Protocol;
28. URGES Contracting Parties to establish or strengthen CEPA programmes to increase awareness of the importance of the role of wetlands in climate change;
29. ENCOURAGES Contracting Parties and their representatives to reach out to their counterparts in the UNFCCC, and its relevant subsidiary bodies, in order to initiate and foster greater information exchange on the actual and potential roles of wetland conservation, management, and restoration activities in implementing relevant strategies, as appropriate, in mitigating greenhouse gas emissions through enhancing carbon sequestration and storage in wetlands;
30. ENCOURAGES Contracting Parties, the private sector, and other stakeholders, consistent with national legislation and circumstances, to explore opportunities for incentives to support the wise use and restoration of wetlands;
31. URGES Contracting Parties to develop and implement policies that promote opportunities to take advantage of the regulatory services already provided by wetlands to the global climate system, while at the same time contributing to improving human livelihoods, eradicating poverty, and meeting biodiversity goals, including the Aichi Biodiversity Targets, and to communicate progress, successes and best practices to the Secretariat, including, *inter alia*, through their national reports;
32. ENCOURAGES Contracting Parties and relevant organizations to undertake studies of the role of the conservation and/or restoration of both forested and non-forested wetlands in relation to: i) climate change mitigation, including the role of wetlands in carbon storage and sequestration, greenhouse gas emissions from degrading wetlands, avoidance of greenhouse gas emissions through removals of wetland carbon sinks, and ii) adaptation to climate change, including water regulation at local and regional scales, such



as flood risk reduction, water supply and storage, and reducing the impacts of sea level rise and extreme weather events, including extreme rainfall situations; and to cooperate, within Regional Initiatives or other regional cooperation fora, in developing and disseminating knowledge about the results, and INVITES Contracting Parties and other organizations to make their findings available to the Ramsar Secretariat, the Secretariat of the UNFCCC, and other relevant bodies through existing reporting processes;

33. URGES Contracting Parties and others to make use of the existing Ramsar guidance on the wise use of wetlands (available in the Handbooks for the Wise Use of Wetlands), much of which is applicable to many of the threats to, and impacts on, wetlands arising from climate change, in developing their policies, including strategies related to adaptations to climate change impacts on wetlands;
34. URGES Contracting Parties and INVITES other governments, and the secretariats and scientific and technical subsidiary bodies of the environment related agreements, to improve collaboration and information exchange on wetlands and climate change at the international level through capacity building, resource mobilisation, and collaborative work programmes, including under such established mechanisms as the Joint Liaison Group of the Rio conventions and the Biodiversity Liaison Group;
35. REQUESTS the Scientific and Technical Review Panel (STRP):
  - i) to continue to prepare advice on the implications of climate change for maintaining the ecological character of wetlands, including *inter alia* strategies for dealing with the emergence of novel<sup>2</sup> or hybrid ecosystems as a consequence of climate change, the determination of appropriate reference conditions for assessing change in ecological character, determining specified limits of change, and the reporting of change in ecological character at Ramsar Sites, and how this can be reflected in Ramsar Information Sheets, and to collate information from such assessments for future meetings of the Conference of the Parties;
  - ii) to collate and assess case studies and other information generated in response to paragraph 32 above and make this available to Contracting Parties;
  - iii) working with interested Contracting Parties and international organizations, to prepare advice on sustainable management of carbon stocks which enhances wetland biodiversity and the delivery of ecosystem services, thereby contributing to human well-being, with special attention to indigenous peoples and local communities;
  - iv) in conjunction with the Secretariat and Ramsar Regional Initiative Networks and Centres, to collaborate with relevant international organizations and conventions, within their respective mandates, to further investigate the potential contribution of wetland ecosystems to climate change mitigation and adaptation through:

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<sup>2</sup> New assemblages of species that have not co-occurred historically, that largely result from direct and indirect human activity, and that occupy new ecological spaces in the world's landscapes and seascapes.

- a) preparing advice on assessing social resilience and vulnerability of wetlands to climate change, to complement the existing advice on assessing the biophysical vulnerability of a wetlands to climate change (Ramsar Technical Report No. 5/CBD Technical Series No. 57);
- b) preparing advice on ecosystem-based adaptation to climate change for coastal and inland wetlands; and
- c) reviewing any relevant advice provide by other MEAs, in particular the outcomes of CBD COP-11;

without pre-empting any future decisions of the UNFCCC;

36. URGES the STRP National Focal Points to engage in and contribute to this work of the STRP (outlined above) in order to provide national and regional perspectives and contribute expertise from their in-country networks of wetland scientists and other experts;
37. Recognizing the role of the Ramsar Convention as the lead implementation partner for wetlands for the CBD, INVITES the 11<sup>th</sup> meeting of the Conference of the Parties to the CBD to consider this Resolution in its relevant deliberations, REQUESTS the Secretary General to bring this Resolution, in particular, to the attention of the Biodiversity Liaison Group (BLG), and INVITES the Executive Secretary of the CBD to bring this Resolution it to the attention of the Joint Liaison Group (JLG); and
38. INVITES Ramsar Administrative Authorities to bring this Resolution to the attention of the national focal points of other MEAs, and ENCOURAGES Contracting Parties to promote collaborative work among the national focal points of these MEAs in support of its implementation.