



11th Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)

“Wetlands: home and destination”

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Agenda item XV

Ramsar COP11 DR14, Rev. 2

Submitted by the DR14 contact group

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

Explanatory note. Curly brackets { } indicate that further information, such as titles of Resolutions adopted by COP11, has still to be supplied.

1. RECALLING that ResolutionX.24 on *Climate change and wetlands* (2008), which updated and superseded Resolution VIII.3 on *Climate change and wetlands: impacts, adaptation and mitigation* (2002), recognized the potential implications of climate change for the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 UNFCCC’s Subsidiary Body for Scientific and Technical Advice (SBSTA), notably the preparation of the “2013 Supplement to the IPCC 2006 Guidelines on National Greenhouse Gas Inventories: Wetlands” (www.ipcc.ch);
4. ~~WELCOMING RECOGNIZING~~ 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 but ALSO~~ 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”, and 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 {COP11 DR9} 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 recognised 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;

5 bis ~~AWARE of the adoption of mandatory accounting for anthropogenic greenhouse gas emissions and removals by sources and sinks resulting from the management of forested wetlands in the second commitment period of the Kyoto Protocol by including emissions resulting from drainage of peatlands for forestry and removals resulting from rewetting of formerly drained forested peatlands (UNFCCC Decision 2/CMP.7);~~ 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);

5. ter ~~AWARE of and that~~ 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;

6. ALSO RECALLING that the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* ({COP11 DR8 rev.1, 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, and 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;
7. WELCOMING the continuing progress made by the Ramsar Convention, as outlined in {COP11 DR6} 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;

8. RECALLING the establishment by the Danone Group, IUCN, and the Ramsar Convention, at 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);
9. RECOGNIZING that ~~the functions of~~ 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;
- 9.bis 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;
- 9.ter 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;
- ~~{10. AWARE that potential funding mechanisms associated with REDD+ (Reducing Emissions from Deforestation and Forest Degradation and the role of Conservation, Sustainable Management of Forests and Enhancement from Forest Carbon Stocks) under the UNFCCC, and elsewhere, may have the potential to provide developing nations with significant funding for the conservation and restoration of forests, including forested wetlands, that contribute, through sustainable forest management, to climate change mitigation, ALSO AWARE that in 2011 the Society for Ecological Restoration made available a review of the opportunities and challenges for ecological restoration within REDD+, and NOTING that many REDD+ projects under development may involve forested wetlands;}~~ 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 United Nations Framework Convention on Climate Change and FURTHER NOTING its importance in helping achieve the objectives of the Ramsar Convention; and ENCOURAGES Parties to promote the importance of wetlands in ongoing discussions on this issue;
- ~~{11. RECOGNIZING that, to be successful, the REDD+ regime should foster explicit linkages between nationally owned forest governance processes and nationally appropriate mitigation actions (NAMAs), and that REDD+ donors and recipients should be encouraged to establish quantifiable, cost-effective and participatory approaches to sustainable forested wetland management that reduces greenhouse gas emissions from deforestation and forest degradation in wetlands, thereby resulting in carbon stock enhancement through wetlands and the delivery of other wetland ecosystem services and~~

~~co-benefits for wetlands biodiversity [for nations, including local communities and indigenous people];]~~

~~11. (ALTERNATIVE) — RECOGNIZING that, to be successful, the REDD+ recipients should be encouraged to establish quantifiable, cost-effective and participatory approaches to sustainable forested wetland management and carbon-stock enhancement in forested wetlands that also enhance wetland biodiversity and the delivery of other wetland ecosystem services, in addition to reducing greenhouse gas emissions from deforestation and forest degradation in wetlands, whilst ALSO RECOGNIZING the adoption of a new accounting activity “wetland drainage and rewetting” adopted at UNFCCC COP 17⁺;~~

12. ~~ALSO~~ 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;

13. 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;

14. RECALLING that the Key Messages of the Millennium Ecosystem Assessment ~~(MA)~~ *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;

15. 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 10th 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 5th Meeting of Parties (MOP5) of the African-Eurasian Migratory Waterbird Agreement (AEWA) in May 2012 of Resolution 5.xx “Climate adaptation change measures for water birds”};

~~16. [NOTING the preparation, in 2009, by the Ad-Hoc Technical Expert Group on Climate Change and Biodiversity of the Convention on Biological Diversity, of a report containing advice on the incorporation of the conservation and sustainable use of biodiversity into climate change mitigation and adaptation activities, summarised 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)]; and~~

¹ Decision 2/CMP.7, land, land-use change and forestry

~~ALSO NOTING that Decision X/33 of the 10th meeting of the Conference of the Parties to the CBD, on biodiversity and climate change, requested advice to be prepared concerning the application of relevant REDD+ safeguards for biodiversity for approval by the eleventh meeting of the Conference of the Parties to the CBD, in October 2012, [which also called for:~~

- ~~i) — undertaking actions to reduce the impacts of climate change on biodiversity and biodiversity-based livelihoods;~~
- ~~ii) — taking ecosystem-based approaches for adaptation, including the protection of peatlands, sustainable wetland management, restoration of degraded wetlands and natural grasslands, and conservation of mangroves, salt marshes and seagrass beds;~~
- ~~iii) — enhancing the conservation, sustainable use, and restoration of marine and coastal habitats that are vulnerable to the effects of climate change or which contribute to climate change mitigation, such as mangroves, peatlands, tidal salt marshes, kelp forests, and seagrass beds; and~~
- ~~iv) — conserving and restoring organic carbon in soil and biomass, including in peatlands and other wetlands,}]~~

~~— as a contribution to achieving the objectives of the UNFCCC, the United Nations Convention to Combat Desertification, the Ramsar Convention on Wetlands, and the Convention on Biological Diversity; }~~

16. 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, summarised 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);

16. Bis WELCOMING decision X/33 of the 10th 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;

17. FURTHER NOTING Target 15² 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 {COP11 DR3} on adjustments to the Ramsar Strategic Plan;

17. bis 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 ~~recognizing~~ that methane and nitrous oxide, emitted as part

² †“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”†

of the nitrogen cycle during de-nitrification in wetlands, has been recognised by the UNFCCC as an important consideration for greenhouse gas fluxes regarding climate change mitigation;

18. 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 {COP11 DR12} which further elaborates 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
19. 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);

THE CONFERENCE OF THE CONTRACTING PARTIES

~~[19 bis AFFIRMS that the terms mitigation, adaptation, carbon sequestration, greenhouse gas emission and carbon storage, in this Resolution, are used in harmony with the current principles, provisions, negotiated outcomes and decisions of the UNFCCC, pertaining to climate change, including decision 2/CMP.7, “Land use, land use change and forestry”];~~ 19 bis ACKNOWLEDGES the distinct mandates and independent legal status of conventions, AFFIRMS that the UNFCCC is the key reference for the terms mitigation, adaptation, carbon sequestration, greenhouse gas emissions and carbon storage used in this Resolution, as they pertain to climate change, and RECOGNIZES that other Conventions refer to these terms within their mandates, and in this context the Ramsar Convention has a key role in the application of these terms to wetlands;

~~20. — ALSO AFFIRMS that this Resolution builds upon Resolution X.24 on *Climate change and wetlands*, which requested the Ramsar Secretariat, the STRP, and the Coordinating Committee for Global Action on Peatlands (CCGAP) to work together with relevant international conventions and agencies (including the CBD, CMS, UNCCD, UNEP, UNDP, FAO and the World Bank, and especially UNFCCC and IPCC, acknowledging the distinct mandates and independent legal status of each convention) and the need to avoid duplication and promote cost savings, to investigate the potential contribution of wetland ecosystems to climate change mitigation and adaptation, especially for reducing vulnerability and increase resilience to climate change, and to prepare advice for Contracting Parties on these matters;~~

~~20 bis [ALSO RECOGNIZING that the [pre-eminent] multilateral forum for discussions on climate change is the UNFCCC];~~

21. 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~~ prioritise and 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;

21.bis. 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 para 5bis (above) for accounting of greenhouse gas emissions from wetlands under a second commitment period under the Kyoto Protocol;

~~{22. URGES Contracting Parties to take all necessary steps, as appropriate, to ensure that their national REDD+ strategies address the wise use of wetlands, through appropriate quantifiable, cost-effective, and participatory approaches to reducing greenhouse gas emissions from deforestation and forest degradation};~~

22. URGES Contracting Parties to establish or strengthen CEPA programmes to increase awareness of the importance of the role of wetlands in climate change;

23. 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;

~~{24. ALSO ENCOURAGES Contracting Parties, the private sector, and other stakeholders, consistent with national legislation, to explore all the existing opportunities for incentive measures and funding mechanisms for climate change mitigation and adaptation activities, for example, those defined in the Cancun Adaptation Framework by the COP16 of the UNFCCC, that can support the sustainable use and restoration of wetlands as well as to support local livelihoods and contribute to poverty eradication, including through the promotion of ecosystem valuation and payments for ecosystem services, consistent and in harmony with the Convention, internationally agreed goals in the economic, social and environmental fields, and other relevant obligations;}~~ENCOURAGES contracting Parties, the private sector and other stakeholders to explore opportunities for incentives and funding mechanisms for climate change mitigation and adaptation to support the wise use and restoration of wetlands;

~~{24. (ALTERNATIVE) ESTABLISHES a fund to enable public sector donors to support wetland conservation and restoration;}~~

25. 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 ~~established by CBD COP10 in the annex to Decision X/2~~, and to communicate progress, successes and best practices to the Secretariat, including, *inter alia*, through their national reports;

26. 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 co-operate, within Regional Initiatives or other regional co-operation fora, to develop and disseminate 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;
27. 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;
28. ENCOURAGES Contracting Parties to review or develop energy policies that recognise the potential impacts of energy generation on wetlands {as noted in COP11 DR10 on wetlands and energy issues} and address, through full and comprehensive life-cycle analysis, the net greenhouse gas emissions of energy generation that include, *inter alia*, potential loss or degradation of wetlands and their ability to sequester and store carbon;
29. 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;
30. REQUESTS the STRP to:
 - i) 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 novel³ 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 Conferences of the Parties;
 - ii) collate and assess case studies and other information generated in response to para. 26 (above) and make this available to Contracting Parties;

³ 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

- 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 Initiatives and Regional 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:
 - 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;

- 32. 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;
- 33. ~~RECOGNIZING-recognizing~~ the role of the Ramsar Convention as the lead implementation partner for wetlands for the CBD, INVITES the 11th 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);
- 34. 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.