



7th MEETING OF THE AEWA STANDING COMMITTEE
26 - 27 November 2011, Bergen, Norway

DRAFT RESOLUTION 5.XX

CLIMATE CHANGE ADAPTATION MEASURES FOR WATERBIRDS

Recalling Resolution 3.17 on *Climate change and migratory waterbirds* and 4.14 on *The effects of climate change on migratory waterbirds* and the request in the latter for the Technical Committee to identify further research priorities that will inform future adaptation measures, and also to assess whether the existing international networks of sites are sufficient for the protection of migratory waterbirds, including the projected climate change effects, and if necessary, to propose to MOP 5 which additional complementary approaches should be taken,

Recalling also the endorsement by MOP4 of *Guidelines on measures needed to help waterbirds to adapt to climate change*,

Noting the need, expressed in Article III of the Agreement, for Contracting Parties to identify networks of sites and habitats for migratory waterbirds, and to protect, management, rehabilitate and restore these as essential actions to maintaining the favourable conservation status of species,

Aware of Resolution 9.7 (2008) [and Resolution 10.19 (2011)] of the Convention on Migratory Species on Climate Change Impacts on Migratory Species, which *inter alia*, called on CMS Parties and others to:

- strengthen research on the interactions of climate change and migratory species, including the impact on habitats and local communities dependent on the ecosystem services provided by these species;
- improve the resilience of migratory species to climate change, *inter alia*, by reducing other threats in order to maintain or increase population size and genetic diversity;
- to develop and implement monitoring regimes that are adequate for distinguishing true declines in populations from transboundary range shifts and for analyzing the impact of climate change on migratory species, *inter alia*, through the following measures:
 - a. ensuring that monitoring is maintained in the long term, using comparative methodologies; and
 - b. communicating and sharing monitoring results regularly with neighbouring and other range states;
- to improve the resilience of migratory species and their habitats to climate change in order to achieve the following objectives among others:

- a. to ensure that individual sites are sufficiently large and heterogeneous in terms of species composition, habitat and topography;
- b. to strengthen the physical and ecological connectivity between sites, permitting dispersal and colonization when species distributions shift; and
- c. to consider the designation of protected areas in areas where migratory species occur at critical stages in their lifecycle and would benefit from extra protection,

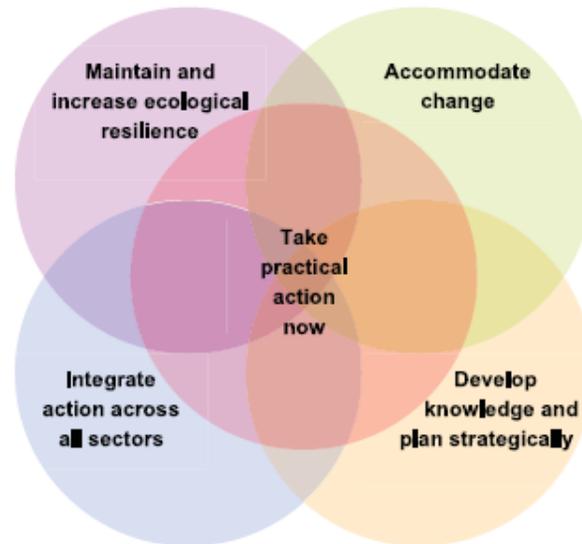
Aware also of assessments by some Contracting Parties of the modelled changes in future distributions of migratory waterbirds consequent on changed climate, and the implications such changes have for national, and hence international networks of protected areas.

The Meeting of the Parties:

1. *Adopts* the framework annexed to this Resolution as further guidance for national actions related to national adaptation measures related to the conservation of waterbirds and their wetland and other habitats; and *urges* Contracting Parties to implement these principles in their national implementation of the Agreement;
2. *Encourages* Contracting Parties to complete the implementation of national networks of protected areas and to undertake national assessments of the resilience of these sites both individually and collectively;
3. *Requests* Contracting Parties to report to the sixth Meeting of Parties (MOP 6) on adaptation measures relevant to migratory waterbirds which have either been undertaken or are planned, and *instructs* the Secretariat - working inter-sessionally with the Technical and Standing Committees - to develop simple but informative reporting frameworks to this end and implement this for MOP 6;
4. *Requests* the Technical Committee to review and summarise relevant studies and policies related to climate change and migratory waterbird conservation and management, especially with respect to networks of protected areas, and to bring such an overview to MOP 6.

Annex. An AEWA guidance framework for climate change adaptation¹

Five main adaptation principles are fundamental to conserving biodiversity in a time of rapid climate change:



The precautionary principle should underpin all of these.

Many elements of these principles are neither new nor specific to climate change adaptation; they underpin existing policy and practice in nature conservation. However, climate change creates a new imperative to understand and work with the dynamics of natural systems. The complex interactions between people and their natural environment must be managed to maintain the services and benefits that society derives from biodiversity and ecosystems. These will be increasingly important and threatened as the climate changes.

¹ This framework is developed, with acknowledgement, from Smithers, R.J., Cowan, C., Harley, M., Hopkins, J.J., Pontier, H. & Watts, O. 2008. *England Biodiversity Strategy: Climate Change Adaptation Principles. Conserving biodiversity in a changing climate.* DEFRA, UK.
<http://archive.defra.gov.uk/environment/biodiversity/documents/ebs-ccap.pdf>

	Existing relevant AEWA and other guidance (English language)	Existing relevant AEWA and other guidance (French language)
Principle 1: Take practical action now		
<p>The speed and scale of climate change require action <u>now</u>. We cannot know exactly how the climate will change or how it will impact directly or indirectly on species, habitats and ecosystems, particularly at a local scale. We cannot wait until the evidence demonstrates greater certainty, as delay will result in more severe impacts, fewer available options for action and increased costs of damage and intervention. This is because of the length of time it will take to implement adaptation action and for biodiversity to respond. Existing conservation efforts are insufficient and there is a need to act now with greater vigour to:</p>		
<p>Conserve existing biodiversity</p> <p>The richness of future biodiversity, even in a changing world, will depend largely upon the biodiversity we conserve today.</p>		
<p>Conserve protected areas and all other high quality habitats</p> <p>These areas will remain important because they have characteristics that will continue to favour high levels of biodiversity. They are key ecological components of wider terrestrial, freshwater and marine ecosystems.</p>	<p>Section Action 3.2 of AEWA Action Plan on conservation of areas</p> <p>Ramsar Handbook for the wise-use of wetlands no. 17: <i>Designating Ramsar Sites</i></p> <p>Ramsar Handbook for the wise-use of wetlands no. 18: <i>Managing wetlands</i></p>	

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	Ramsar Handbook for the wise-use of wetlands no. 19: <i>Addressing change in wetland ecological character</i>	
Reduce sources of harm not linked to climate Climate change is one of many threats to biodiversity. By reducing other sources of harm we will help natural systems maintain their biodiversity in the face of climate change.		
Use existing biodiversity legislation and international agreements Existing legal and policy frameworks should be used to enable effective action now while working with policy-makers to remedy any potential shortcomings.	Ramsar Handbook for the wise-use of wetlands no. 20: <i>International cooperation</i>	
Principle 2: Maintain and increase ecological resilience		
Increasing the resilience of ecosystems to the impacts of climate change, will help the widest range of biodiversity to survive and adapt. Ecological resilience ‘depends on a dynamic relationship within species, among species and between species and their abiotic environment, as well as the physical and chemical interactions within the environment’ (Convention on Biological Diversity, 2000). It is vital to continue and extend current efforts to:		

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<p>Conserve range and ecological variability of habitats and species</p> <p>It is impossible to predict which localities will continue to have climatic conditions suitable for a given species or habitat. Diversity of terrestrial, freshwater and marine ecosystems, in terms of physical features and habitats, should be maintained. This will increase the chances that species whose current habitat becomes inhospitable will be able to spread locally into newly favourable habitat.</p>		
<p>Maintain existing ecological networks</p> <p>Further habitat fragmentation and isolation should be avoided by maintaining sympathetic management of terrestrial, freshwater and marine ecosystems and implementing appropriate spatial planning.</p>	Ramsar Handbook for the wise-use of wetlands no. 17: <i>Designating Ramsar Sites</i>	
<p>Create buffer zones around high quality habitats</p> <p>High quality habitats can be buffered from potential negative edge effects by reducing the occurrence of damaging activities in their immediate vicinity. For example, this may be achieved on land by creating the same or complementary habitats adjacent to them.</p>	Action 3.3 of AEWA Action Plan on rehabilitation and restoration	
<p>Take prompt action to control spread of invasive species</p> <p>The establishment of invasive species known to cause significant habitat degradation or loss of other species should</p>	AEWA Guidelines on Avoidance of Introductions of non-native Waterbird Species	

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be prevented where action can be sustained.		
Principle 3: Accommodate change		
<p>Establish ecological networks through habitat restoration and creation</p> <p>Some species will need to move some distance from their current locality if they are to survive climate change. The success of species dispersal can be promoted by enhancing protected areas and creating new habitat, restoring degraded habitat, and sympathetically managing areas between existing habitats in the wider environment.</p>	Action 3.3 of AEWA Action Plan on rehabilitation and restoration	
<p>Aid gene flow</p> <p>The ability of a species to adapt to change is correlated with genetic diversity and population size, so conservation should seek to maintain or create large populations. Gene flow between populations is desirable but care may be required where small populations have been isolated for a long period and local genetic variation may be swamped.</p>		
<p>Consider the role of species translocation and ex-situ conservation</p> <p>Translocation (introduction, reintroduction and restocking) and captive-breeding programmes may be used to conserve some species. Large-scale translocations may be impractical.</p>	AEWA Recommended best practice for the conservation of threatened waterbirds through action planning and re-establishment (Resolution 4.4) which was based on	

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	Review of waterbird re-establishment projects	
<p>Develop the capacity of institutions and administrative arrangements to cope with change and learn from experience</p> <p>We must learn to be effective in a changing and uncertain world. This will require a cultural shift to work positively towards a future of potentially different circumstances, learning from experience, and sharing information more widely within and between organisations, whilst retaining consistent objectives.</p>	<p>AEWA Guideline series</p> <p>African Initiative for the conservation of migratory waterbirds and their habitats in Africa (Resolution 4. 9)</p>	
<p>Respond to changing conservation priorities</p> <p>Conservation targets need to be regularly reviewed to ensure resources are directed towards conservation priorities as some species increase, others decline and habitats change in character. Adaptation policy across all sectors needs to be built on a foundation of healthy and resilient ecosystems. Different sectors of society view biodiversity and ecosystems in terms of their own economic, cultural and societal needs. Biodiversity is critical both for its intrinsic value and because of the key role it plays in providing the ecosystem and other services upon which we all ultimately depend. Yet competing economic uses of land, water resources and the marine environment usually undervalue biodiversity and natural</p>	<p>Ramsar Handbook for the wise-use of wetlands no. 3: <i>Laws and institutions</i></p>	

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<p>systems, sometimes with widespread incentives and subsidies that lead to damage to the environment. The scale of adaptation required demands that biodiversity conservation is integrated with economic activities on land and at sea. There is a need to:</p>		
<p>Integrate adaptation and mitigation measures</p> <p>Biodiversity conservation can contribute to carbon management; for example, as a result of peatland restoration or native woodland creation. Mitigation should not harm biodiversity and should recognise opportunities for biodiversity, thereby contributing to adaptation.</p>		
<p>Integrate policy and practice across relevant economic sectors</p> <p>Adaptation measures for biodiversity should be explicitly linked with the wider benefits that they bring. Conservation organisations alone cannot deliver the scale of change required but they can demonstrate and catalyse action for biodiversity across all relevant economic sectors. In this way, conservation can be interwoven with other activities for effective delivery of ecosystem goods and services.</p>	<p>Ramsar Handbook for the wise-use of wetlands no. 5: <i>Partnerships</i></p>	
<p>Build and strengthen partnerships</p> <p>Partnerships between the public and private sectors should form a fundamental part of the process of developing climate change adaptation strategies from the outset. Engagement with stakeholders and local communities is crucial to</p>	<p>Ramsar Handbook for the wise-use of wetlands no. 5: <i>Partnerships</i></p> <p>Ramsar Handbook for the wise-use of wetlands no. 7:</p>	

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developing adaptation actions that will work best on the ground.	<i>Participatory skills</i>	
<p>Raise awareness of benefits of the natural environment to society</p> <p>Wider appreciation that adaptation for biodiversity is in the interests of individuals, communities and businesses will lead to demand and support for implementation. This should build on recognition of environmental services provided by biodiversity and ecosystems.</p>	<p>AEWA Communications Strategy</p> <p>Ramsar Handbook for the wise-use of wetlands no. 6: <i>Wetland CEPA</i></p>	
Principle 4: Integrate action across partners and sectors		
<p>We cannot know exactly how the climate will change or its precise impacts on biodiversity but we do know the general trends and some specific species responses. We have to plan for the future with available information, developing techniques that will enable us to move forward with actions that we will not regret whatever the future may bring. Simultaneously, we must strive to learn more about the impacts of climate change on biodiversity and ecosystems and to monitor the effectiveness of adaptation.</p>		
<p>Undertake vulnerability assessments of biodiversity and associated ecosystem goods and services without delay</p> <p>Vulnerability to climate change is ‘the degree to which a system is susceptible to, or unable to cope with, adverse</p>		

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effects of climate change, including climate variability and extremes' (Intergovernmental Panel on Climate Change, 2007). Assessing vulnerability will help to identify priorities and develop appropriate actions.		
Principle 5: Develop knowledge and plan strategically		
Undertake scenario planning and implement no regrets actions There is a need to make strategic decisions by embracing uncertainty and addressing the full range of likely variation in projected changes and their impacts. It is important to avoid selection of one preferred future in the hope that it will become true.		
Pilot new approaches and monitor New approaches to conservation management need to be piloted and monitored at a large scale and within a time period commensurate with the challenge.		
Identify potential win-win solutions and ensure cross-sectoral knowledge transfer Win-win solutions are policies and measures that deliver several adaptation measures at once or that also bring other social and economic benefits.		

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<p>Monitor actual impacts and research likely future impacts</p> <p>Gaining knowledge of actual and projected impacts of climate change on biodiversity is essential to help shape and adapt conservation action.</p>		
<p>Improve understanding of the role of biodiversity in ecosystem services</p> <p>Implementing an ecosystems approach requires a better understanding of the benefits provided by biodiversity and ways in which ecosystem services will be affected by climate change.</p>		
<p>Research knowledge gaps with stakeholder participation</p> <p>Climate change adaptation has cross-sectoral implications. Ensuring stakeholders have a common understanding of and commitment to new evidence is essential to develop policy and practice.</p>		