

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

"Healthy wetlands, healthy people"

Changwon, Republic of Korea, 28 October-4 November 2008

### Ramsar COP10 DOC. 31

Note from the Ramsar Secretariat. The INTECOL International Wetlands Conference is the premier scientific gathering for wetland experts. Meetings take place every four years and provide a forum for technical sessions, conferences, and round tables about the study, research, conservation politics, protection, management and sustainability of wetlands. Conferences have most recently have been held in Utrecht, the Netherlands (2004), Québec, Canada (2000), and Perth, Australia (1996) – the 8th INTECOL Conference, on the theme of "Big Wetlands, Big Concerns", 20-25 July 2008, was appropriately held in the city of Cuiaba, Brazil, at the border of the Pantanal, an enormous wetland complex shared by Bolivia, Brazil and Paraguay. As in past INTECOL Wetland meetings, the resulting declaration includes recommendations of special interest for the Ramsar Parties.

#### The Cuiabá Declaration on Wetlands

This Declaration was approved by vote of the members present at the closing of the 8th INTECOL Wetland Conference held 20-25 July, 2008, in Cuiabá, Brazil

# The State of Wetlands and Their Role in a World of Global Climate Change

This Declaration is directed to governments, international and national organizations, and decision makers. It calls attention to the ecological and legal state of wetlands and their worldwide importance for humans and biodiversity under the special consideration of global climate change scenarios.

#### Whereas:

- 1. Wetlands are transitional ecosystems between land and water that cover a considerable part of the earth's surface and comprise different ecosystems that are permanently or periodically wet, such as mangroves, tidal marshes, peat bogs, swamps, river floodplains, riparian zones, salt lakes, and others. Some of them are highly productive systems that are widely used by humans. Wetlands support people and biodiversity and are necessary to adjust to the anticipated effects of global climate change that we all face.
- 2. The current lack of basic knowledge regarding the global extent of wetlands is unacceptable. Effective techniques for achieving a global wetlands inventory have been demonstrated. Systematically acquired space borne optical and microwave remote sensing data sets are essential to identify and characterize wetlands within the framework of the Ramsar Convention and for various other purposes.

- 3. Wetlands suffer a number of impacts from human activities, mainly from agriculture (including grazing), aquaculture, water regulation and infrastructure, waste disposal, and invasive species. Peat bogs suffer from large scale peat extraction, and river floodplains are affected by the construction of dams for hydropower generation and by lateral dikes that modify the water regime and, consequently, the flux of dissolved and solid materials, but also disrupt the linkages along rivers and between rivers and their floodplains.
- 4. Freshwater biodiversity is declining faster than terrestrial or marine biodiversity, and wetland species are especially prone to decline and extinction.
- 5. Rising energy prices are leading to the large-scale cultivation of plants for bio-fuels. In addition to the problems of rising food prices, the increasing demand for bio-fuels will stimulate an expansion of energy-crop plantations at the cost of areas covered by natural vegetation. We call attention to the danger of the direct negative impacts on wetlands by land reclamation and drainage, and to the indirect impacts caused increased inputs of sediments, fertilizers, and pesticides from surrounding croplands. Rising energy prices also stimulate the use of hydroelectric power. We call attention to the heavy impact of large and small hydroelectric power plants on riverine wetlands and the loss of benefits to the local population. Wise social policy decisions require sound cost-benefit analyses that include environmental and social parameters in order to adapt these mega-projects to economically, ecologically and socially acceptable standards *before* construction is started, because mitigation of many negative side-effects is not possible.
- 6. Wetlands also provide habitation and sustenance for many people. There are numerous wetland stressors that seriously affect the many important ecosystem services provided by wetlands, such as the storage and purification of water, recharge of subterranean aquifers, buffering of water discharge, maintenance of landscape heterogeneity and biodiversity, carbon storage, and production of renewable natural resources such as fishes, natural pasture, timber, wildlife, and others.
- 7. Global climate change scenarios for the next century project a global temperature increase of 2-6° C, a rise in sea level of 20-40 cm, and considerable changes in the total amount and/or seasonal distribution of rainfall. The change from snowfall to rainfall and accelerated melting of glaciers in parts of some continents will reduce the water retention capacity in winter and modify the discharge patterns of streams and rivers. There will be an increase of extreme climate events, such as large storms, severe droughts and floods. These changes will affect with varying strength the different eco-regions of the globe and will put at risk the important services which wetlands provide for humans and biodiversity. They will also increase the risk of spreading disease vectors affecting human health, in some areas.
- 8. Intact wetlands can buffer the impacts of global climate change through the water cycle and maintenance of biodiversity, and reduce negative economic, social and ecological effects.
- 9. Wetland conservation and restoration is a necessary means to reduce greenhouse gas emission. The importance of wetlands in the global carbon cycle needs to be better

- assessed and integrated into global climate models and political efforts to negotiate carbon trading.
- 10. Large-scale wetland destruction is continuing as a consequence of inadequate national development policies, lack of enforcement of existing laws, and the lack of long-term land use planning that negatively affect wetlands on public and private property. Future changes in global climate will seriously exacerbate the current situation.
- 11. Worldwide, the human population is increasingly concentrated in urban areas. Local and regional wetlands have an exceptionally high value for water storage, water purification and recreation, but they are also under increased threat by land reclamation and pollution.
- 12. A modern wetland policy based on sound scientific knowledge and able to reconcile economic development with environmental protection and social welfare is required in all countries. This policy should acknowledge the value of wetlands and their ecosystem services, as well as their importance for global biodiversity. Some countries have high standards for wetland management, restoration, and protection; many others, however, are far behind.
- 13. There are 158 countries that are signatories to the Ramsar Convention that regulates the worldwide management and protection of wetlands. The Convention requires that the signatories establish and implement a specific wetland policy, prepare a national wetland inventory, and maintain the ecological character of all wetlands through wise use.

#### Therefore:

- 1. We recommend that the contracting parties of the Ramsar Convention and others support initiatives that take advantage of global remote sensing data sets and techniques to consistently and accurately map wetland extent, dynamics and variability. We encourage the providers of spaceborne remote sensing data sets to ensure the long-term continuity of these crucial information sources.
- 2. We call for appropriate and effective protection measures that will quickly reverse the negative impacts on wetland quality and quantity, including impacts arising from bio-fuel policy, inappropriate water management, land use, and climate change.
- 3. We call attention to the urgent need to immediately intensify the national and international efforts to study, protect and wisely manage all wetlands. We support increased funding of research *and* the implementation of scientific results that are urgently needed to reduce the vulnerability of wetlands to climate change, mitigate the drivers of climate change, and adapt to the consequences.
- 4. We recommend that wetland protection should give high priority to maintaining their services for the benefit of mankind.
- 5. We stress that joint efforts across political boundaries are needed to optimize all our efforts to stop and reverse the loss and degradation of wetlands. Sound policies and practices are needed now.

6. We call attention to the fact that many signatories of the Ramsar Convention have not yet fulfilled their requirement to establish and implement a specific wetland policy, to prepare a national wetland inventory, and to maintain the ecological character of all wetlands through wise use. We ask for immediate action from the respective governments to accomplish their agreements in the Ramsar Convention. We encourage non-member states to join the Ramsar Convention and to strengthen the global effort needed to sustainably manage wetlands.

Respectfully Approved by:

#### Co-Organizers 8th INTECOL Wetland Conference

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