

The Skukuza symposium statement

Skukuza, Kruger National Park, South Africa, 13th October 2006

Conservation of freshwater ecosystems is crucial for providing reliable and clean water supplies needed to sustain people, ecosystems and nature. Globally, freshwater biodiversity and habitats are being lost at an unprecedented rate. On 9-13 October 2006, 33 experts from government and non-government organizations, with particular expertise from Australia, South Africa and the USA, gathered in Skukuza, South Africa, to identify solutions for freshwater conservation, especially through improved establishment and management of protected areas for freshwater conservation.

What is the problem?

There is:

- Massive decline of freshwater biodiversity, which is worse than that recorded for terrestrial and marine biomes;
- Growing demand for water and increasing pollution over large parts of the world threaten remaining freshwater biodiversity;
- The likelihood that these threats will be exacerbated by climate change, and by inadequate or inappropriate government responses to climate change, such as the construction of more dams for hydroelectricity and water supply.

Large areas of freshwater habitats are incorporated in protected areas (e.g. Ramsar sites), but these are not properly representative of the diversity of habitats (examples were presented from Australia, South Africa and the USA) and:

- Rarely are sustained by environmental flows (as evidenced by the non-delivery of the agreed 'ecological reserve' water downstream to the Kruger National Park - the Symposium's venue);
- Existing protected areas were often not designated and managed for freshwater conservation, for example by excluding headwaters or using rivers as boundaries (as evidenced by the Kruger National Park - the Symposium venue);
- Usually are not networked effectively.
- Are often viewed and managed as a necessary resource for conserving terrestrial biodiversity rather than for their intrinsic biodiversity value

Freshwater biodiversity is still rapidly declining; therefore current protected areas are not adequate for freshwater conservation thus far.

Conserving freshwater ecosystems is one of the greatest governance challenges faced by modern societies. There are multiple and often conflicting demands placed upon freshwater. Nearly everyone lives within a river basin and everyone needs to be part of the solutions for their conservation.

The Symposium discussed the low priority afforded by most governments to better freshwater ecosystem management, and concluded that:

- Conservation of freshwater ecosystems is critical for sustainable livelihoods and the achievement of human development targets; the wise management of ecosystem services provided by freshwater is the key link in achieving multiple development targets.
- Governments and societies are often unaware of the need to conserve freshwater ecosystems, threats to them and opportunities to manage them better.
- There are unique opportunities now to advance freshwater conservation, especially for freshwater protected areas, through commitments made under the Convention on Biological Diversity and the Ramsar Convention on Wetlands.

The Symposium concluded that the world community needs to enhance conservation management, especially by using areas for the protection of:

- The entire freshwater biome at the largest scale through wise use and conservation;
- Environmental processes, such as the flow of sediments and nutrients in rivers needed to sustain the ecology of floodplains, deltas and estuaries;
- Attributes that provide particular ecosystem services from natural wetlands, services such as clean water, medicinal plants and fish;
- Freshwater-dependant species, such as mammals, birds, fish;
- Ecological communities, such as floodplain forests, lakes, and peat swamps.

To best manage and conserve freshwater habitats, it is critical that a linked set of actions are implemented concurrently at different scales, ranging from sites, to small catchments, to entire river basins, to concerted national and international actions. Protected areas are one of the most important strategies for conserving inland water biodiversity at local to basin scales. Integrated river basin (catchment / watershed) management, and the provision of adequate water flows are two other critical actions that are needed.

The symposium agreed that the roles of protected areas regarding the conservation of freshwater ecosystems are to:

- Conserve biodiversity *in situ* (species, wetlands types)
- Maintain ecological processes (e.g. free-flowing, icon sites lever allocation of flows)
- Manage the ecosystem and biodiversity to deliver defined ecosystem goods and services, e.g. to sustain fisheries and/or reliable sources of clean water supply
- Act as scientific reference points
- Reduce user group conflicts

The Symposium urges IUCN – the World Conservation Union, through it’s World Commission on Protected Areas, to redefine its definition of protected areas to better embrace freshwater conservation. We propose that protected areas be redefined as:
“An area of land, inland waters and/or sea especially dedicated to the protection and maintenance of biological diversity, ecological processes and the ecosystem services provided, and of natural and associated cultural resources, and managed through

legal or other effective means."

The Symposium concluded with the participants committing themselves to actions designed to help governments and society better conserve freshwater ecosystems for people and nature. These actions include:

- Preparing and distributing guidelines and case studies publicly on: a) management guidelines for optimal conservation of freshwater biodiversity in protected areas; b) establishing protected area systems to conserve freshwater biodiversity at the national scale;
- Developing criteria, guidelines and case studies, and develop a place where rivers that are protected as free-flowing rivers can be registered by governments and celebrated;
- Supporting national governments to implement national protected area systems to conserve freshwater biodiversity;
- Existing method and case study materials are being published on the website: www.protectedareas.info

The Symposium concluded that:

- Freshwater habitats need to be conserved as the source of water for people and nature;
- Effective protected areas are one of the best tools for conserving freshwater ecosystems to benefit people and nature;
- Globally, peace, good health and food security depend on sustainable management of freshwater ecosystems as the main source of water for people and nature;
- A well managed aquatic environment is the best defence against disasters such as floods and droughts and the best response to mitigate against the impacts of climate change.

The world's governments face a huge challenge to manage freshwater ecosystems sustainably – mitigating the threats is urgent. The future of freshwater biodiversity and the critical ecosystem services that it provides, such as drinking water, food, nutrient cycling, flood and drought control, depend on immediate action. Fortunately the government commitments that have been agreed under the Convention on Biological Diversity and Ramsar Convention on Wetlands provide a unique opportunity to establish an effective protected areas system that will make a major contribution, by 2010, to significantly reduce the rate of biodiversity loss as a contribution to poverty alleviation and to the benefit of all life on earth.