

Communiqué points (10/9/09)

“Management of environmental flows in a changing climate”

Meeting of the global wetland and rivers expert group 2009 (Skukuza 2009)

The following key resolutions are from the Global Wetlands and Rivers Expert Group meeting in Goolwa at the mouth of the River Murray on the Lower Lakes and the Coorong. They represent the deliberations of scientists from around the world about the key challenges and opportunities for better management of rivers and wetlands, including those of the Murray-Darling Basin and its rivers and wetlands including the Lower Lakes and the Coorong.

1. There is considerable momentum to stop and reverse the degradation of rivers, wetlands and estuaries with legislation and political support promoting resilience. This is only achievable with good planning, involvement of stakeholders and investment in good information, including through rigorous science.
2. Communities and environments are already adapting to changes in our rivers and water availability. This adaptation will increase with climate change.
3. There is a need to embrace change and uncertainty of systems and recognise opportunity for better management of rivers, wetlands and estuaries.
4. We need to know more about future options and directions of change for rivers, wetlands and estuaries and their dependent species and processes. This is a major issue for the Murray-Darling Basin where there is need to improve our ability to quantitatively assess such options.
5. There should be greater promotion of adaptive water governance, planning and management that promotes flexibility and produces vibrant communities that learn from this experience. Adaptive governance, planning and management should occur at all levels from basin, individual rivers to wetlands or estuaries and be linked.
6. Adaptive water planning and management requires clear articulation of the desired future conditions; objectives and targets that are measurable, auditable and adaptable; assessment of management options; implementation of a preferred option; monitoring and evaluation and; feedback mechanisms that promote learning.
7. The desired future condition should represent a jointly crafted vision based on articulated values of all stakeholders, following a fair process.
8. Environmental flows should be managed throughout entire river basins, recognising the connectivity of rivers, wetlands and estuary.
9. River health depends on both water management and land management. Adaptive governance, planning and management approaches should be applied jointly to water and land management to improve rivers health.
10. Removal of water from rivers has had significant ecological impacts on rivers, wetlands and estuaries. Where there is evidence or threats of irreversible environmental damage to

these ecosystems, there need to be reductions on diversions to levels that promote ecosystem resilience.

11. We need to systematically prioritise wetlands, estuaries and rivers assets for conservation and restoration management. We also need to identify the extent of key aquatic communities of organisms (e.g. vegetation) and their degree of dependence on river flows.
12. Weirs, levees and other water management infrastructure significantly fragment river, wetland and estuarine habitats, disrupting movement of animals, dispersal of plants and altering water quality. Currently there are few government resources allocated to addressing this problem. A proportion of the “Water for the Future” funds could usefully be directed to mitigating the adverse environmental effects of such structures in the Murray-Darling Basin through innovative operating strategies or removal of structures where they are deemed to be redundant given changing water management.
13. There are beneficial measures that could be implemented irrespective of the future and not affect water shares. For example
 - a. Manage regulated flows to improve ecosystem responses when associated with water delivery.
 - b. Encourage community works programs for rivers, wetlands and estuaries
 - c. Restoring more wetlands and riparian buffers on rivers to reduce pollution run-off
 - d. Increasing connectivity and hydrodynamics in rivers, wetlands and estuaries (e.g. fishways)