



## IUCN – The World Conservation Union

### Water Law Series – Issue 4

#### ***Conservation and Integrated Water Resources Management***

##### ***What is integrated water resources management?***

The term integrated water resources management has been used in many different ways and there is no universally agreed definition.

One way is in the context of the integrated management of all water resources ie surface water, groundwater, the interface with marine waters and so on.

Another has been with regard to integrating the management of water with the management of other natural resources (such as soil and native vegetation, and even dealing with related management issues such as alien invasive species). This approach seeks to integrate natural resource management more broadly and in so doing to, for example, integrate policies that seek to improve water use, prevent land degradation and encourage the conservation of biological diversity.

Integrated water resources management also relates to the scale at which issues are addressed, namely at the catchment or basin scale, and the engagement of all stakeholders in actions to address the many different facets of water management.

##### ***What are the legal challenges to implement integrated water resources management?***

In general, legal regimes have not approached water in an integrated way.

Laws have not reflected the relationship between different kinds of water resources: surface, groundwater, coastal, oceanic and atmospheric waters. In other words, laws have not tended to recognise the hydrologic cycle, ie the process involving rainfall, absorption, runoff, evaporation and infiltration. Laws have also not well reflected the interconnectedness between quantity and quality of waters.

Rivers and lakes have been traditionally managed without considering the surrounding areas and associated natural resources, such as mountains, forests, fauna and the marine and coastal environment.

##### ***Why integrate conservation in integrated water resources management?***

A proper understanding of environmental issues relating to water resources is a fairly recent phenomenon.

It is only through the integration of conservation into integrated water resources management that one can ensure the ongoing maintenance of the wide range of services provided by ecosystems and the livelihoods that depend upon them.



### ***How to integrate conservation into integrated water resources management?***

The integration of conservation into integrated water resources management requires the legislator to consider how to adequately address such issues in legislation. This includes the need to give legislative consideration to:

- Understanding the water cycle;
- Incorporating the ecosystem approach, understood as a management strategy for the integrated management of land, water and living resources which promotes conservation and sustainability;
- Placing an economic value to the wide range of services provided by ecosystems;
- Adopting measures to overcome fragmented management of water resources at the national and sub-national levels, and to improve the co-ordination between different political levels involved in water management (Issue 3);
- Ensuring the full participation of civil society in the planning and implementation processes;
- Promoting the integration of environmental management into economic decision-making processes;
- Establishing harmonised systems of environmental impact assessment at a basin level (Issue 10);
- Considering the possible impacts of climate change (see Issue 6);
- Preventing and controlling water resources pollution (see Issue 5);
- Allocating adequate flows for the maintenance of ecosystem functions (Issue 7);
- Adopting measures that discourage unsustainable water resources uses and practices, including voluntary measures as well as market tools.

### ***Where do I go for further assistance?***

The IUCN Environmental Law Programme: see below for contact details.

#### **IUCN Environmental Law Centre for the IUCN Environmental Law Programme**

Contact the IUCN Environmental Law Centre at: [waterlaw@elc.iucn.org](mailto:waterlaw@elc.iucn.org)

Visit the IUCN Environmental Law Programme Website at: [www.iucn.org/themes/law](http://www.iucn.org/themes/law)

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