

INTEGRATED ECOSYSTEMS: A RECENT STRATEGY FOR WATER MANAGEMENT

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"There is no life without water." The first article of the European Water Charter - Strasbourg, 1968 - clearly states the basic importance of water, not only for economic and social development, but also for the sustainability of life on Earth. The principles of the Charter are continuously implemented, through environmental policy, by all developed countries. Later, the Rio de Janeiro Conference, held in 1992, declared the urgent protection of water resources as an essential condition for the development of future generations.

The integrated protection of water resources within the natural/hydrological river basins represents the recent strategy for water management. This implies, inter alia, the application of environmental approaches, taking into account the fact that the state of and changes in water quality result from interactions between water quantity, biotic and abiotic factors, and habitat structure in the streams and floodplains. Accordingly, restoration of biodiversity, as close as possible to the natural situation, is one of the main goals of watershed rehabilitation.

Because of this, environmental research and programmes for protection and improvement of watercourse habitats form an integral element of water management action plans. Experience can be drawn from examples of International Commission environmental programmes, such as the Environmental Programme for the Protection of the Elbe River. Based on the evaluation of river ecosystems, conservation, as well as other relevant improvement measures, can be proposed.

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