

Integrating riparian wetlands into river basin management – towards an ecohydrological approach

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Abstract In recent decades, ecologists and water managers have recognized that the riparian wetlands, besides their ecological value and potential, provide numerous – in certain cases badly abused or overused – ecosystem services, even at the river basin level. However, at present, despite numerous guidelines and directives, there is practically no scientifically supported management of endangered riparian wetlands at the local or basin scale. Wetlands should be a coherent part of integrated river basin management to ensure their conservation, sustainable use and also their positive impacts on the river and river basin. However, complex and flexible long-term wetland management plans, which could be integrated into the river basin management plans, are not available. Thus a united ecologically and hydrologically appropriate method is missing. The paper describes the role of the ecohydrological approach and summarizes the state of the art, issues and potential responses with the example of the Hungarian Danube Basin.

Key words ecohydrology; riparian wetlands; integrated river basin management; Hungarian Danube Basin