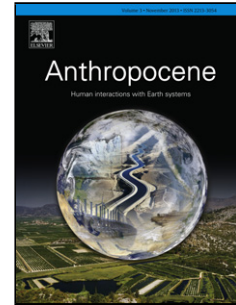


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Assessment of the interaction between surface- and groundwater after the diversion of the inner delta of the River Danube (Hungary) using multivariate statistics

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Abstract

Anthropogenic activity such as damming or diversion of rivers cause extensive disturbance to ecosystems, as well as the interaction between surface water and groundwater. Following the diversion in 1992 of the River Danube (NW Hungary) and the construction of a water barrage system, the level of shallow groundwater dropped and altered the connection between surface water and groundwater. This paper outlines the changes in the interaction of surface water and shallow groundwater and other related environmental consequences caused by an 80% decrease in runoff resulting from this intervention. The time series (1996-2004) of 27 water quality variables measured from three surface and three subsurface sampling sites

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