



Hydrology and hydrogeology of the karst river Rjecina (Croatia)

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Hydrological and hydrogeological investigations of the karst river Rjecina (Croatia), which has outflow in the Adriatic Sea, is presented. The paper treats a complex case of surface and groundwater circulation in a typical Dinaric karst catchment, which whole area is about 400 km². In average 1500 l/s of karst groundwater in the catchment is used for water supply. On the central part of the Rjecina River the Valici dam and reservoir for hydropower production are constructed. Both of mentioned reasons, as many others natural and anthropogenic, influenced strong changes of hydrological regime on the Rjecina River and catchment. In paper special attention is paid on the analyses of the hydrological behaviour of the Rjecina karst spring. Its exit is at the altitude of 325 m a. s. l., and mean annual discharge is 7.14 m³/s. The natural and anthropogenic influences on the decreasing of the Rjecina spring discharges during the 1947-2003 period are explained.