



Influence of water use of the Kamniška Bistrica river on low flows

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The use of water of the Kamniška Bistrica river has very long tradition known from the Austro-Hungarian era when water was mostly used for operating of water mills. For that purposes the artificial channels were built on the both side of the river at the length of around 10 km on its lower stream. The Kamniška Bistrica rises in the Kamnik Alps and with its length of 33 km is known as torrential river. Nowadays the main use of water is designed for operating of small hydroelectric plants located on the channels, as technological water and fish farming.

On Sunday morning 28 September 2008 the main stream of the Kamniška Bistrica river downstream of the origin of channels dried up and more than 500 kg of fishes died in that part of the stream. During the September and October 2008 the precipitation was below the average on the catchment and this was reflected in low flows of the streams. In that hydrological condition some removals of sands were performed from the river bed. To find out the reason for drying up of the main stream, the hydrological analysis was done for the period from September to October 2008 using the data of national hydrological monitoring network. In spite of the low flows the results show that the discharges on the nearest water measurement stations without anthropogenic influences were above the mean low periodical discharges. Almost all water from the main stream was diverted to channels using for the production of electricity not taking into account that some amount of water is needed in the main, sensitive part of the river. This event was not the first, but that time some actions occurred by the competent authority with setting up the rules of diversion of water from the Kamniška Bistrica river and determination of ecologically acceptable flow.