

Abstract

The contemporary approach to the evaluation of surface water quality is looking at rivers in their complex hydro-ecological ecosystems. Primarily, the quality is assessed from biological, hydro-morphological and physicochemical points of view.

This project is about water quality analysis and a hydro-biological survey. Therefore, an ecomorphological monitoring in the basins of the upper Blanice river, the Libečovka river and the Rolava river was carried out previously. These basins were chosen in order to show the different geographical conditions and various socioeconomic uses of the land. As regards water quality, the upper reaches of the Blanice River and the upper reaches of the Rolava River rank among the cleanest rivers with mountain headwaters and a peat bog influence. The lower reaches of the Rolava have been more significantly influenced by human activity. The Libečovka river is a lowland watercourse running through landscape that is agriculturally utilised and used for leisure activities. It is significantly polluted in its upper reaches.

All the results have been reciprocally compared and put in context with the results of detailed ecomorphological research (Lelut, 2007, Šípek, 2006, Vondra, 2006).