

Abstract

Hydromorphology processes in streams are very important components of assessment of ground waters quality grade and are so closed to biotic elements of ecosystems of lotic waters. This document is referred to channel assessment of mountain rivers in Křemelná river basin. Instream channel processes are based on their parameters in predetermine methods which are measured directly in field. Therefore, field survey in catchment is necessary to be a part of characterization of hydromorphological processes. Data from this survey are used to evaluation of stream conditions with the assistance of Channel Assessment Procedure method (CAP) and Rapid Bioassessment Protocols method (RBP). The Canadian method CAP deals with morphological types of lotic freshwaters and classifies parts of rivers on the ground of stream gradient, bed sediments and bank material. On the contrary, the American method RBP is based on stream channel processes and assesses complete quality of river habitat. Both methods (CAP and RBP) are taken for complex stream assessment. Therefore, the comparison of these methods is not possible. The synthesis of evaluated results offers a complete hydromorphological view of selected. Other important parts of determination this view, are natural conditions and runoff assessment of river basin based on continual flow measurements in selected rivers of Křemelná river basin.