

Abstract

In the field of river restorations, topics being currently discussed are assessing success and quantifying effects that river restoration measures should have. This bachelor thesis deals with an assessment of the river restoration effects based on the hydromorphology. Current knowledge in fields of hydromorphology and fluvial geomorphology are presented in the theoretical part of this thesis. Recent outcomes and methodical procedures that are used to evaluate the effects of river restoration measures are also included. A method was developed based on the theoretical part of this thesis and the method EcoRivHab in order to assess the restoration effects by selected parameters. The method was applied on the restored segment of Litovický stream in Hostivice town in the practical part. The results of the thesis showed what a significant impact the restoration had on Litovický stream (in average +33.74 %). The parameter *maximum flow velocity* showed the highest effect (+84.9 %). On contrary, the parameter *structure of bank vegetation* had the only negative effect (-1.8 %).

Key words: streams, river restoration, restoration effect, hydromorphology, hydromorphological survey